

PHILADELPHIA CENTENNIAL EXHIBITION, 1876.

VICTORIA, AUSTRALIA.

O F F I C I A L

CATALOGUE OF EXHIBITS

ESSAYS, &C.

"Ingens pateat tellus nec sit terris ultima Thule."



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INDEX TO CLASSIFICATION.

DEPARTMENT I.—MINING AND METALLURGY.

MINERALS, ORES, BUILDING STONES, AND MINING PRODUCTS.

	Page
Class 100.—Minerals, ores, &c. Metallic and non-metallic minerals, exclusive of coal and oil. Collections of minerals systematically arranged; collections of ores and associated minerals; geological collections	5-75
Class 101.—Mineral combustibles. Coal, anthracite, semi-bituminous and bituminous, coal-waste and pressed coal; albertite, asphalt, and asphaltic limestone; bitumen, mineral tar, crude petroleum	79
Class 102.—Building stones, marble slates, &c. Rough, hewn, sawed, or polished, for buildings, bridges, walls, or other constructions, or for interior decoration, or for furniture. Marble—white, black, or coloured—used in building decoration, statuary, monuments, or furniture, in blocks or slabs not manufactured	79
Class 103.—Lime, cement, and hydraulic cement, raw and burned, accompanied by specimens of the crude rock, or material used, also artificial stone, concrete, beton. Specimens of lime mortar and mixtures, with illustrations of the process of mixing, &c. Hydraulic and other cement. Beton mixtures and results, with illustrations of the processes. Artificial stone for building purposes, building blocks, cornices, &c. Artificial stone mixtures, for pavements, walls, or ceilings. Plasters, mastics, &c.	80
Class 104.—Clays, kaolin, silex, and other materials for the manufacture of porcelain faience, and of glass, bricks, terra-cotta, and tiles, and fire-brick. Refractory stone for lining furnaces, sandstone, steatite, &c., and refractory furnace materials	80
Class 106.—Lithographic stones, hones, whetstones, grindstones, grinding and polishing materials, sand quartz, garnet, crude topaz, diamond, corundum, emery in the rock and pulverised, and in assorted sizes and grades	80
Class 107.—Mineral waters, artesian well water, natural brines, saline and alkaline efflorescences and solutions. Mineral fertilising substances, gypsum, phosphate of lime, marls, shells, coprolites, &c., not manufactured	80

METALLURGICAL PRODUCTS.

Class 113.—Lead, zinc, antimony, and other metals, the result of extractive processes	81
---	----

DEPARTMENT II.—MANUFACTURES.

CHEMICALS.

Class 200.—Chemicals, pharmaceutical preparations, and fertilizing compounds. Mineral acids, and the methods of manufacture. Sulphuric, nitric, and hydrochloric acids.	
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Class 200.—(continued)

The common commercial alkalis, potash, soda, and ammonia, with their carbonates.

Salt and its production. Salt from deposits—native salt. Salt by solar evaporation from sea-water. Salt by evaporation from water of saline springs or wells. Rock salt. Ground and table salt.

Bleaching powders and chloride of lime.

Fertilizing compounds made from bones, guano, fish, and other organic sources.

Fertilizing compounds, made from mineral phosphates, potash, salts, and other mineral sources. Stassfurth compounds

Yeast powders, baking powders - - - - - 81

Class 201.—Oils, soaps, candles, illuminating and other gases.

Oils from mineral, animal, and vegetable sources. Refined petroleum, benzine, naphtha, and other products of the manufacture. Oils from various seeds, refined, and of various degrees of purity. Olive oil, cotton-seed oil, palm oil. Animal oils, of various kinds, in their refined state. Oils prepared for special purposes besides lighting and for food. Lubricating oils.

Soaps and detergent preparations.

Candles, stearine, glycerine, paraffine, etc., spermaceti.

Illuminating gas and its manufacture.

Oxygen gas, and its application for heating, lighting, metallurgy, and as a remedial agent.

Chlorine and carbonic acid - - - - - 94

Class 202.—Paints, pigments, dyes, colours, turpentine, oils, varnishes, printing inks, writing inks, blacking - - - - - 95

Class 203.—Medicinal compounds, flavouring extracts, essences, perfumery, pomades, cosmetics - - - - - 95

Class 204.—Explosive and fulminating compounds; in small quantities only, and under special regulations, shown in the building only by empty cases and cartridges. Black powder of various grades and sizes. Nitro-glycerine and the methods of using and exploding. Giant powder, dynamite, dualin, tri-nitro-glycerine - - - - - 96

CERAMICS—POTTERY, PORCELAIN, ETC.

Class 206.—Bricks, drain-tiles, terra cotta, and architectural pottery - - - 96

Class 207.—Fire clay goods, crucibles, pots, furnaces. Chemical stoneware - 96

Class 208.—Tiles, plain, enamelled, encaustic; geometric tiles and mosaics. Tiles for pavements and for roofing, etc. - - - - - 96

Class 210.—Stone china, for chemists, druggists, etc., earthenware, stoneware, faience, etc. - - - - - 96

GLASS AND GLASSWARE.

Class 214.—Glass used in construction and for mirrors. Window glass of various grades of quality and of size. Plate glass, hammered, and ground or polished. Malleable glass - - - - - 97

Class 215.—Chemical and pharmaceutical glassware, vials, bottles - - - 97

Class 216.—Table and decorative glassware - - - - - 97

FURNITURE AND OBJECTS OF GENERAL USE IN CONSTRUCTION AND IN DWELLINGS.

Class 217.—Heavy furniture.—Chairs, tables, parlour and chamber suites, office and library furniture. Church furniture and decoration - - - - - 97

Class 219.—Mirrors, stained and enamelled glass, cut and engraved window-glass, and other decorative objects - - - - - 98

Class 220.—Vestibule and hall furniture, rubber and cocoa mattings, shoe cleaners, umbrella-stands, etc. - - - - - 98

Class 221.—The nursery and its accessories; children's chairs, walking chairs 98

Class 222.—Apparatus and fixtures for heating and cooking—stoves, ranges, heaters, etc. - - - - - 99

	Page
Class 224.—Kitchen and pantry—utensils, tinware, and apparatus used in cooking (exclusive of cutlery)	99
Class 225.—Laundry appliances, washing machines, mangles, clothes wringers, clothes bars, ironing tables	99
Class 226.—Bath-room and water closets, shower bath, earth closet	99

YARNS AND WOVEN GOODS OF VEGETABLE OR MINERAL MATERIALS.

Class 229.—Coarse fabrics, of grass, rattan, cocoa nut, and bark. Mattings, Chinese, Japanese, palm-leaf, grass, rushes. Floor cloths of rattan and cocoa nut fibre, aloe fibre, &c.	99
--	----

WOVEN AND FELTED GOODS OF WOOL AND MIXTURES OF WOOL.

Class 235.—Card wool fabrics.—Yarns, broadcloth, doeskins, fancy cassimeres	101
Class 237.—Blankets, robes, and shawls	101
Class 238.—Combined wool fabrics.—Worsted, yarns, dress goods for women's wear, delaines, serges, poplins, merinoes	101

SILK AND SILK FABRICS, AND MIXTURES IN WHICH SILK IS THE PREDOMINATING MATERIAL.

Class 242.—Cocoons and raw silk as reeled from the cocoon, thrown or twisted silks in the gum	102
Class 243.—Thrown or twisted silks, boiled off or dyed, in hanks, skeins, or on spools	102
Class 246.—Figured silk piece goods, woven or printed. Upholstery, silks, &c.	102

CLOTHING, JEWELLERY, AND ORNAMENTS, TRAVELLING EQUIPMENTS.

Class 251.—Hats, caps, boots and shoes, gloves, mittens, &c., straw and palm-leaf hats, bonnets, and millinery	102
Class 254.—Artificial flowers, coiffures, buttons, trimmings, pins, hooks and eyes, fans, umbrellas, sun-shades, walking-canes, pipes, and small objects of dress or adornment, exclusive of jewellery	103
Class 255.—Fancy leather work, pocket-books, toilet cases, travelling equipments, valises and trunks	103

PAPER, BLANK BOOKS, AND STATIONERY.

Class 260.—Printing paper for books, newspapers, &c. Wrapping paper of all grades, cartridge and manilla paper, paper bags	103
---	-----

MILITARY AND NAVAL ARMAMENTS, ORDNANCE, FIRE-ARMS, AND APPARATUS OF HUNTING AND FISHING.

Class 265.—Military small-arms, muskets, pistols, and magazine guns, with their ammunition	107
Class 268.—Knives, swords, spears, and dirks	107

MEDICINE, SURGERY, PROTHESIS.

Class 279.—Vehicles and appliances for the transportation of the sick and wounded, during peace and war, on shore or at sea	107
---	-----

HARDWARE, EDGE TOOLS, CUTLERY.

Class 284.—Hardware used in construction, exclusive of tools and implements. Spikes, nails, screws, tacks, bolts, locks, latches, hinges, pulleys. Plumbers' and gasfitters' hardware, furniture fittings, ship's hardware, saddlers' hardware and harness fittings and trimmings	108
--	-----

CARRIAGES, VEHICLES, AND ACCESSORIES.

Class 292.—Pleasure Carriages	109
Class 296.—Carriage and horse furniture, harness and saddlery, whips, spurs, horse blankets, carriage robes, rugs, &c.	108

DEPARTMENT III.—EDUCATION AND SCIENCE.

EDUCATIONAL SYSTEMS, METHODS, AND LIBRARIES.

Page

Class 300.—Elementary instruction. Infantschools and Kindergartens, arrangements, furniture, appliances, and modes of training.

Public schools, graded schools, buildings and grounds, equipments, courses of study, methods of instruction, text books, apparatus, including maps, charts, globes, etc.; pupils' work, including drawing and penmanship, provisions for physical training - - - - - 109

Class 303.—Institution for instruction of the blind, deaf, and dumb - - - 109

Class 305.—Libraries, history, reports, statistics, and catalogues - - - 110

INSTITUTIONS AND ORGANISATIONS.

Class 313.—Music and the drama - - - - - 114

SCIENTIFIC AND PHILOSOPHICAL INSTRUMENTS AND METHODS.

Class 327.—Musical instruments and acoustic apparatus.

Percussion instruments, drums, tambourines, cymbals, triangles.

Pianos.

Stringed instruments other than pianos.

Automatic musical instruments, music boxes.

Wind instruments of metal and of wood.

Harmoniums.

Church organs and similar instruments.

Speaking machines.

Vocal music. - - - - - 115

ENGINEERING, ARCHITECTURE, CHARTS, MAPS, AND GRAPHIC REPRESENTATIONS.

Class 330.—Civil engineering. Land surveying, public lands, &c.

River, harbour, and coast surveying. Construction and maintenance of roads, streets, pavements, &c. Surveys and location of towns and cities, with systems of water supply and drainage. Arched bridges of metal, stone, brick, or beton. Trussed girder bridges. Suspension bridges. Canals, aqueducts, reservoirs, construction of dams. Hydraulic engineering, and means of arresting and controlling the flow of water.

Submarine constructions, foundations, piers, docks, &c. - - - 115

PHYSICAL, SOCIAL, AND MORAL CONDITION OF MAN.

Class 342.—The dwelling. Sanitary conditions and regulations. Domestic architecture.

Dwellings characterised by cheapness, combined with the conditions essential to health and comfort.

Fire-proof structures.

Hotels, club-houses, etc.

Public baths. - - - - - 190

Class 344.—Money. Mints and coining.

Collections of current coins.

Historical collections.

Tokens, etc.

Bank notes and other paper circulating mediums.

Commercial paper, bills of exchange, etc.

Security for payment of money, stocks, bonds, mortgages, ground rents, quit rents.

Precautions against counterfeiting and misappropriation of money - 190

Class 345.—Government and law. Various systems of government.

Departments of government. Revenue and taxation, military organisation, executive powers, legislative forms and authority, judicial functions and systems, police regulations, government charities.

International relations; international law; diplomatic and consular service, etc., allegiance and citizenship; naturalisation.

Codes.

Class 345.—(continued.)	
Municipal government.	
Protection of property in inventions.	
Postal system and appliances.	
Punishment of crime.	
Prisons and prison management and discipline; police stations; houses of correction; reform schools; naval or marine discipline; punishment at sea	190
Class 347.—Co-operative associations.	
Political societies and organisations.	
Military organisations and orders.	
Trade unions and associations.	
Industrial organisations.	
Secret orders and fraternities	191
Class 349.—Art and industrial exhibitions.—Agricultural fairs, state and county exhibitions, national exhibitions, international exhibitions, international congresses, &c.	192

DEPARTMENT IV.—ART.

SCULPTURE.

Class 402.—Medals, pressed and engraved; electrotypes of medals	192
---	-----

PAINTING.

Class 410.—Paintings in oil on canvas, panels, &c.	192
--	-----

ENGRAVING AND LITHOGRAPHY.

Class 420.—Drawings with pen, pencil, or crayons	193
Class 423.—Lithographs, zincographs, &c.	193

PHOTOGRAPHY.

Class 430.—Photographs on paper, metal, glass, wood fabrics, or enamelled surfaces	193
Class 432.—Photo-lithographs, &c.	196

INDUSTRIAL AND ARCHITECTURAL DESIGNS, MODELS, AND DECORATIONS.

Class 442.—Decoration of interiors of buildings	197
---	-----

DEPARTMENT V.—MACHINERY.

MACHINES, TOOLS AND APPARATUS OF MINING, METALLURGY, CHEMISTRY, AND THE EXTRACTIVE ARTS.

Class 501.—Well and shaft boring	197
Class 503.—Hoisting machinery and accessories	197
Class 504.—Pumping, draining, and ventilating	198
Class 505.—Crushing, grinding, sorting, and dressing. Breakers, stamps, mills, pans, screens, sieves, jigs, concentrators	198

RAILWAY PLANT, ROLLING STOCK AND APPARATUS.

Class 571.—Carriages, waggons, trucks, etc.	198
---	-----

WATER TRANSPORTATION AND APPLIANCES.

Class 573.—Wheels, tires, axles, bearings, etc.	
Class 590.—Boats and sailing vessels. Sailing vessels used in commerce. Sailing vessels used in war. Yachts and pleasure boats. Rowing boats of all kinds. Life boats and salvage apparatus, with life rafts, belts, etc. Submarine armour, diving bells, etc. Ice boats	198

DEPARTMENT VI.—AGRICULTURE.

ARBORICULTURE AND FOREST PRODUCTS.

Page

- Class 600.—Timber and trunks of trees, entire or in transverse or truncated sections, with specimens of barks, leaves, flowers, seed vessels, and seed.
 Masts, spars, knees, longitudinal sections of trees, railway ties, ship timber, lumber roughly sawn; as planks, shingles, lath, and staves.
 Timber and lumber prepared in various ways to resist decay and combustion; as by injection of salts of copper and zinc 199
- Class 601.—Ornamental woods used in decorating and for furniture; as veneers of mahogany, rosewood, ebony, walnut, maple, and madrona 213
- Class 602.—Dyewoods, barks, and galls for colouring and tanning 213
- Class 603.—Gums, resins, caoutchouc, gutta percha, vegetable wax 213

AGRICULTURAL PRODUCTS.

- Class 620.—Cereals, grasses, and forage plants 214
- Class 623.—Tobacco, hops, tea, coffee, and spices 216

LAND ANIMALS.

- Class 635.—Poultry and birds 216
- Class 637.—Wild animals 217
- Class 638.—Insects, useful and injurious. Honey bees, cochineal, silk worms 217

MARINE ANIMALS, FISH CULTURE, AND APPARATUS.

- Class 641.—Fishes, living or preserved 218

ANIMAL AND VEGETABLE PRODUCTS.

- Class 651.—The dairy.—Milk, cream, butter, cheese 219
- Class 652.—Hides, furs, and leather, tallow, oil, and lard, ivory, bone, horn, glue 219
- Class 656.—Preserved meats, vegetables, and fruits. Dried or in cans or jars.
 Meat and vegetable extracts 221
- Class 657.—Flour, crushed and ground cereals, decorticated grains 220
- Class 660.—Wines, alcohol, and malt liquors 222, 236
- Class 661.—Bread, biscuits, crackers, and cakes 241

TEXTILE SUBSTANCES OF VEGETABLE OR ANIMAL ORIGIN.

- Class 665.—Cotton on the stem, in the boll, ginned, and baled 242
- Class 666.—Hemp, flax, jute, ramie, etc., in primitive forms and in all stages of preparation for spinning 242
- Class 667.—Wool in the fleece, carded, and in bales 242
- Class 668.—Silk in the cocoon and reeled 247

MACHINES, IMPLEMENTS, AND PROCESSES OF MANUFACTURE.

- Class 670.—Tillage.—Manual implements, spades, hoes, rakes. Animal power machinery, ploughs, cultivators, horse-hoes, clod-crushers, rollers, harrows. Steam power machinery, ploughs, breakers, harrows, cultivators 247
- Class 674.—Applicable to farm economy.—Portable and stationary engines, chaffers, hay and feed cutters, slicers, pulpers, corn mills, farm boilers and steamers, incubators 248

DEPARTMENT VII.—HORTICULTURE.

ORNAMENTAL TREES, SHRUBS, AND FLOWERS.

- Class 707.—Ferns, their management in the open air, and in ferneries, wardian cases, etc. 248
- Class 709.—Floral designs, etc. Cut flowers, bouquets, preserved flowers, leaves, sea-weeds. Illustrations of plants and flowers. Materials for floral designs. Bouquet materials, bouquet holders, bouquet papers; models of fruits, vegetables, and flowers 248

INDEX TO EXHIBITORS.

	Page		Page
Aboriginal Mission Station . . .	216	Commissioners for Victoria for the	
Acadia Catherine Gold Mining		Philadelphia Exhibition, Mel-	
Company	75	bourne	
Adams, R. T.	96	77, 79, 80, 93, 95, 96, 97, 100, 102,	
Adams, James	214	103, 107, 110, 114, 115, 116, 190,	
Alcock and Co.	97	191, 192, 193, 194, 196, 213, 214, 216,	
Ararat, Shire Council of	193	217, 218, 219, 242, 244, 247, 248, 255	
Armstrong, Alexander	242	Cornish and Co.	198
Arnold, George, and Co.	242, 243	Costerfield Gold and Antimony	
Arthur and Dogherty	80	Mining Company	78, 81
Atkinson, William	242	Creswick, Borough Council of . .	195
Baker, John	98	Crippa, Fabrizzio	237
Ballarat Woollen Mill Company .	101	Cunningham, Hastings, and Co. .	245
Bank of Victoria	190	Currie, John Lang	244
Barwon Woollen Mill Company .	101	Curtis, J. W.	193
Bass River Steam Saw Mills . .	199	Danks, John	108
Batchelder and Co.	193	Darebin, Shire Council of . . .	195
Baths, Treatise on	147	Davis, J.	98
Batten, William	236	Degraves, C. and J.	244
Bear and Ford	238	Deppeler, Jacob	237
Bendigo Pottery Co.	96	De Richelieu, Madame F. . . .	103
Bennett, T. K.	221	Docker, F. G. and J. B.	236
Best, Joseph	236	Donaghy, Michael	100
Bird, George	219	Dowling, William	197
Birmingham and Lacey	96	Draper and Sons	99
Bleasdale, Rev. J. L., D.D. . .	71, 75	Dunckley and M'Bride	219
Bock, Henry	194	Echuca, Borough Council of . .	195
Boddy, Edward	220	Educational Department of Vic-	
Bodington, Robert	248	toria	109
Bogle, Andrew, and Co.	99	Egli, F.	238
Borthwick, Alexander	95	Elder, W. and N. G.	244
Bosisto, Joseph	91	Emerald Hill, Borough Council of	195
Botanic Gardens, Director of, Mel-		Evans, Henry	236
bourne	101, 106, 199, 213, 221	Ferguson and Urie	97
Bowman, John S.	95, 193	Ferres, John	114
Brasche, Charles	239	Fink, M.	219
Brearley Brothers	219	Fischer, August	240
Bright Brothers and Co.	81	Fitts, Charles, and Sons	95, 219
Brown, H. J.	241	Ford Brothers	102, 103
Bruhn, Albert	239	Fox, Adolph	240
Buckley, Edward	214	Francis, Charles	238
Carr and Sons	98	French, C.	217
Campbell, O. R.	192	Friendly Societies	188
Chuck, T. F.	194	Fuller, Alfred	241
Clark, John, and Sons	213, 219	Gaskell, Joseph	217
Colac, Shire Council of	194	Gaskell, Mrs.	255
Commercial Bank of Australia .	190	Gilbert, Alfred Napoleon	244
Comport, Henry	221	Gilmour, Andrew	214
Connor, James	214	Gledhill, —	97

	Page		Page
Glenister, W. A. - - -	108	Melbourne Hospital - - -	178
Godfrey, F. R. - - -	217	Melbourne Meat Preserving Com-	
Goldsbrough, R., and Co. - - -	244	pany - - -	221
Gray, Alexander and Co. - - -	101	Melbourne Philharmonic Society -	146
Grant, Mrs. - - -	221	Melbourne University - - -	117
Greeves, Edward - - -	244	Mellon, Francis - - -	236
Greer and Co. - - -	237	Microscopical Society - - -	138
Grieffenhagen, Wm. - - -	240	Miller, James, and Co. - - -	100
Grimwood, Thomas - - -	217	Mining Department of Victoria -	79
Grosse, Frederiek - - -	240	Model Lodging House - - -	186
Guerard, E. Von - - -	193	Moncrieff, John - - -	215
Guest, T. B. and Co. - - -	241	Moore and Co. - - -	246
Guthrie, G. D. - - -	99	Morrison, L. K. - - -	197
Gymnastics, Treatise on - - -	146	Mount and Co. - - -	97
Hanekar, J. H. H. - - -	78	Murphy, Edward - - -	197
Harkness, A. and Co. - - -	198	Muschialli, Louis - - -	98
Hattersley, J. - - -	80	Myring, Joseph - - -	215, 220
Heathcote, T. S. - - -	197	National Bank of Australia - - -	190
Henelly, James - - -	241	National Gallery of Victoria - -	139
Henty, Edward - - -	246	Noble, Timothy - - -	196
Hodgson, Richard - - -	81	Nolan, Luke - - -	96, 97
Hodgson Brothers - - -	98	North-Eastern Pastoral and Agri-	
Hogg, S. P., and Co. - - -	95	cultural Society - - -	215
Hood and Co. - - -	93	O'Keefe, Andrew - - -	215
Hood, F. and J. - - -	220	O'Malley, Edmund - - -	198
Hotham Town Council - - -	195	Paterson Brothers - - -	197
Howard John - - -	247	Pausacker, Evans and Co. - - -	99
Industrial and Reformatory Schools	161	Pearse Brothers - - -	219
Jack, John - - -	214	Penal Department, Inspector-Gene-	
Johnstone, H. J. - - -	193	ral of - - -	103, 191, 220
Johnstone, O'Shannessy and Co. -	195	Penal Discipline - - -	148
Johnston, J. S. - - -	238	Pepper, George - - -	197
Jung, Otto - - -	236	Perrin, William, jun. - - -	220
Keynes, Joseph - - -	264	Perry, Davis and Co. - - -	138
Kilner, Joseph - - -	115	Perry, Hunter and Co. - - -	96
Kitchen and Sons - - -	95	Phoenix Foundry Company - - -	196
Laidlay, John - - -	215	Pierce, G. G. - - -	219
Lands and Agriculture, Depart-		Pohl, Carl - - -	239
ment of - - -	212	Polson, Angus - - -	215
Lang, William - - -	246	Prahran, Town Council of - - -	196
Latham, Edward - - -	241	Public Library, Melbourne - - -	118
Lennon, Hugh - - -	247	Quinn, H. S. - - -	220
Lewis and Whitty - - -	80, 94, 95	Ramsden, Samuel - - -	107
Local Government - - -	147	Reed, Henry, and Co. - - -	241
Longmore, Thomas - - -	242	Reeves, Isaac Godfrey - - -	246
Lyon, George - - -	80	Retreat for the Cure of Inebriates	186
Lyon, George - - -	221	Riddle, J. - - -	219
M'Coy, Professor - - -	217	Ritchie, John - - -	237
M'Donald, Donald - - -	195	Robertson Brothers - - -	196
M'Ewan, James - - -	98	Robertson, John - - -	101
M'Gie, James, and Co. - - -	78	Robertson, W. W. - - -	217
M'Ilwraith, John - - -	108	Rosier, John - - -	103
M'Kenzie, Jas. F., and Co. -	216, 220	Rossi, Thomas - - -	215
M'Nair, Angus - - -	215	Rothwell, Wade - - -	108
M'Pherson, Thomas - - -	100	Rowlands and Lewis - - -	81
M'Pherson, Thomas, and Co. -	242	Russell, Thomas - - -	246
M'Vean, John - - -	246	Rutledge, William - - -	246
Mansfield Shire Council - - -	79	Rutherford, Andrew - - -	246
Maplestone, Charles - - -	239	Sandhurst, City Council of - - -	196
Martin, P. J. - - -	220, 241	Sanitary Regulations - - -	184
Melbourne Glass Bottle Company -	97	Schmitt, Louis - - -	215

	Page		Page
Schmitt, Franz - - - -	238	Treacy, John, and Co. - - -	241
Schröder, E. - - - -	237	Trouette and Blampied - - -	236
Scott, James - - - -	215	Vettler, John - - - -	237
Shaw, Alfred, and Co. - - -	99	Victorian Asylum and School for the Blind - - - -	109
Shaw, F. K. - - - -	240	Victorian Deaf and Dumb Institu- tion - - - -	137
Shenandoah Gold Mining Compy. -	78	Victoria Ladies' Sericultural Com- pany - - - -	102
Smith and Son - - - -	242	Walker, A. R. - - - -	99
Smith, R. Brough - - - -	5, 78	Wallis and Company - - - -	220
Smyth, G. S. - - - -	239	Wangaratta, Shire Council of -	196
Snowden, E. G. - - - -	239	Warrenheip Distillery Company -	241
Stanway, W. - - - -	107	Warrnambool, Borough Council of	114
Stevenson and Elliott - - - -	109	Watson and Paterson - - - -	221
Stewart and Co. - - - -	196	Watson, Alexander - - - -	247
Stewart and Ferguson - - - -	215	Webber, Jacob - - - -	237
Stewart, James - - - -	241	West Bourke Pastoral and Agricul- tural Society - - - -	215
Stoneman, Alfred - - - -	108	Western Meat Preserving Company	221
Stoneman, Edward - - - -	198	White, David - - - -	197
Stringer and Co. - - - -	94, 221	Whitehead, Isaac - - - -	193
St. Arnaud Pastoral and Agricul- tural Society - - - -	215	Wiegmann, August - - - -	88
St. Hubert's Vineyard Company -	238	Willett, G. - - - -	196
St. John, F. - - - -	216, 217	Wilson, Sir Samuel - - - -	196, 247
Sullivan, Joseph - - - -	94	Wilson, John - - - -	247
Surveyor-General of Victoria -	115, 196	Woodward, George - - - -	94
Swallow and Ariell - - - -	242	Wright, Payne and Co. - - -	221
Synnot Monckton - - - -	246	Zoological and Acclimatisation So- ciety, Melbourne - - - -	102
Synnot, George, and Co. - - -	246	Zorn, Edward - - - -	221
Taylor, John - - - -	215		
Thomas, C. Thomas - - - -	246		
Timbrell, Ann - - - -	102, 217		
Timms Brothers - - - -	246		

Philadelphia Centennial Exhibition, 1876.

VICTORIAN DEPARTMENT.

OFFICIAL

CATALOGUE OF EXHIBITS.

DEPARTMENT 1.—MINING AND METALLURGY.

MINERALS, ORES, BUILDING STONES, AND MINING PRODUCTS.

CLASS 100.—Minerals, ores, &c. Metallic and non-metallic minerals, exclusive of coal and oil. Collections of minerals systematically arranged; collections of ores and associated minerals; geological collections.

COLLECTION OF ROCKS, MINERALS, AND FOSSILS, ILLUSTRATIVE OF THE GEOLOGY, MINERALOGY, AND MINING RESOURCES OF VICTORIA, Exhibited for and on behalf of the Government, by R. Brough Smyth, F.G.S., F.L.S., Assoc. Inst. C.E., Secretary for Mines and Chief Inspector of Mines for the Colony.

OLDER IGNEOUS OR PLUTONIC ROCKS.

GRANITES, PORPHYRIES, ETC.

- 1 Granite. Common ternary; medium grained. From Brewery Springs, Maldon.
- 2 Granite. Common ternary; coloured brownish in parts by ferruginous infiltrations; coarse and fine grained; portions of orthoclase, very large. Mount Alexander.

- 3 Granite. Common ternary; medium grained. Station Peak, Geelong.
- 4 Granite. Common ternary; medium grained and rather felspathic. Mansfield.
- 5 Granite. Common ternary; medium grained and rather felspathic. Mansfield.
- 6 Granite. Common ternary; very micaceous. Chiltern.
- 7 Granite. Common ternary; medium grained; mica much affected by decomposition. Preston Vale.
- 8 Granite. Common ternary; very coarse grained and poor in mica, the latter of white and green colour; has somewhat the character of "Graphic Granite;" encloses a large patch of quartz. Beechworth.
- 9 Granite. Common ternary; coarse grained and highly felspathic, with patches of a dull pink mineral. Fraser's, Preston Vale.
- 9A Granite. Fine grained granite base, rendered porphyritic by crystals of dull greenish black mica (hornblende?), which are more or less decomposed; texture, on one face, porphyritic; in cross-fracture, somewhat gneissose. From a dyke, Tongio, Gippsland.
- 10 Granite. Common ternary; fine grained, very poor in mica; approaching to binary. Mount Alexander.
- 11 Granite. Main portion is binary and fine grained, and consists of quartz and felspar, the latter predominating. The other portion is ternary, with white mica; coarse grained and highly felspathic. Encloses portions of metamorphic lower silurian rock. From a vein ramifying into the silurian at the granite boundary, near Mount Tarrangower.
- 12 Granite. Binary, composed of quartz and felspar; fine grained and highly felspathic; a few scales of brown mica occur porphyritically dispersed through the mass; one face consists of coarse grained common ternary granite. From a vein in common granite, Bryant's Island, Loddon River, near Tarrangower.
- 13 Granite. Binary, composed of quartz and felspar; fine grained and rather quartzose. Duck Ponds Creek, Station Peak, near Geelong.
- 14 Granite. Binary, composed of quartz and felspar; fine grained and rather felspathic. Mount Alexander.
- 14A Graphic-Granite. Station Peak, near Geelong.
- 15 Syenite-Granite. Quaternary. (Quartz, felspar, mica, and hornblende). Coarse grained; mica greenish white; felspar—which appears to be composed of much plagioclase—strongly affected by decomposition; hornblende rather scarce; impregnated with iron and arsenical pyrites, and traversed by auriferous quartz veins, a crushing of which gave 15oz. of gold per ton. From a dyke, the so-called "Kangaroo Reef," Acheron Diggings.
- 16 Syenite-Granite. Red orthoclase, quartz and hornblende; medium grained. Gabo Island.

- 17 Syenite-granite. (Hornblende, felspar, and quartz); medium grained; traversed by a small quartz vein. From a small intrusive mass in lower silurian slate, near Tarilta, Castlemaine District.
- 18 Syenite-Granite. Same as No. 17; strongly affected by decomposition; of porphyritic aspect; encloses patches of silurian rock. Neighbourhood of Tarilta.
- 19 Syenite-Granite. Hornblende, felspar, and quartz, in association with fine grained "Epidote Rock." Locality same as No. 17.
- 19A Syenite-Granite. Quartz and hornblende forming a fine-grained base, rendered porphyritic by the distribution of larger felspar crystals, which are slightly decomposed. From a dyke at Cobyngbar River, 25 miles from Bendoc, Gippsland.
- 20 Epidote-Granite. Orthoclase, quartz, and epidote; the latter crystallized in small patches. Nuggety Gully, Talbot.
- 21 Granite-Porphyry. Fine grained; common ternary granite base with large crystals and patches of felspar, crystals and grains of quartz, and scales of mica. From a dyke traversing granite, Tarrengower.
- 22 Granite-Porphyry. Very fine grained, common ternary granite base, with large crystals and patches of felspar, quartz, and mica; felspar consists of orthoclase and some plagioclase. From a dyke traversing granite, Tarrengower.
- 23 Syenite-Granite-Porphyry. Very fine grained, brownish grey syenite-granite base without mica, with dispersed crystals of hornblende and felspar; on one face in connection with syenite-granite. Dargo Flat, Gippsland.
- 23A Syenite-Granite-Porphyry. Fine grained syenite-granite base, with crystals of felspar and rounded grains of quartz. From a dyke at Cobyngbar River, 25 miles from Bendoc, Gippsland.
- 23B Syenite. Fine grained mixture of orthoclase and hornblende, with small patches of "epidote," which are more or less decomposed. From a dyke near the One-mile Tree, Tongio, Gippsland.
- 23c Epidote-Syenite. Medium grained mixture of flesh-coloured orthoclase and light green epidote. From a dyke near One-mile Tree, Tongio, Gippsland.
- 23D Syenite-Porphyry. Fine-grained, dark brown syenite base, with larger crystals of hornblende distributed through it. From a dyke near One-mile Tree, Tongio, Gippsland.
- 24 Felsite-Porphyry. Felsite base with scattered crystals of felspar, and mica, the former rather large—also quartz in rounded grain. From a dyke traversing granite, Mount Tarrengower.
- 25 Felsite-Porphyry. Dark greenish grey felsite base with small crystals of glassy felspar (orthoclase), hornblende and quartz, the latter rather scarce. From a dyke at Bulgoback, Gippsland.

- 26 Felsite-Porphyry. Light grey felsite base with crystals of felspar, mica, and rounded quartz grains. Eumemmering Creek, near Dandenong.
- 27 Felsite-Porphyry. Dark greenish grey felsite base with pretty large crystals of glassy felspar (orthoclase) and small scales of mica. From a dyke in granite, South Gippsland.
- 28 Felsite-Porphyry (Eurite-Porphyry, Quartz-Porphyry). Felstone base, densely impregnated with crystals and grains of quartz. From a dyke traversing granite, Nuggety Gully, Sandy Creek, Maldon.
- 29 Felsite-Porphyry (Hornstone-Porphyry). Dark grey felsite base with crystals of felspar and small-scaly patches of black mica. Baynton.
- 30 Felstone-Porphyry (Quartz-Porphyry). Felstone base quite decomposed to a ferruginous clayey substance. Lancefield-road.
- 30A Felsite-Porphyry. Felsite, or siliceo-felspathic base, with crystals and grains of quartz and black particles of what appears to be hornblende. From a dyke at Noyong, Gippsland.
- 30B Felsite-Porphyry. Felsite base, with crystals of felspar and sparingly grains of quartz. From a dyke at Navigation Creek, Gippsland.
- 30c Felsite-Porphyry (Quartz-Porphyry). Felsite base, with crystals and grains of quartz, and very sparingly such of felspar. From a dyke at Noyong, Gippsland.
- 30D Felsite-Porphyry. Crypto-crystalline, siliceo-felspathic base, with crystals of felspar and quartz; slightly affected by decomposition. From a dyke at Noyong, Gippsland.
- 30E Felsite-Porphyry. Felsite base, with grains and crystals of quartz, felspar, and hornblende (?), the latter small and more or less decomposed; densely impregnated with iron pyrites. From Cobyngbar River, twenty-five miles from Bendoc, Gippsland.
- 30F Felsite-Porphyry. Felsite base, densely filled with grains and crystals of quartz and sparingly such of felspar. From a dyke at Noyong, Gippsland.
- 30G Felsite-Porphyry. Crypto-crystalline-granular, brownish black, siliceo-felspathic base, through which are very sparingly distributed crystals and grains of quartz and felspar. From a dyke at Navigation Creek, Gippsland.
- 31 Felsite (Petrosilex). From a dyke traversing lower silurian rock, Maldon.
- 32 Felsite (Felstone, Elvanite). Forms a dyke accompanying a quartz-reef at Templestowe.
- 33 Felsite (Elvanite). Shows a brecciated appearance, resulting from partial decomposition. From a dyke at Keelbundora.
- 34 Felstone (Elvanite). Strongly affected by decomposition. From a dyke in granite, near Bryant's Island, Loddon River.
- 35 Felstone (Elvanite). Same as No. 34, but rather ferruginous. Same locality as No. 34.

- 35A Felsite (Petrosilex). Dense, siliceo-felspathic rock, showing lines of lamination. From a dyke at Navigation Creek, Gippsland.
- 35B Felsite (Felstone). Siliceo-felspathic rock; of brecciated appearance, through being more or less decomposed and earthy, and showing ferruginous seams; in contact with granite. From a dyke, Omeo township, Gippsland.
- 35c Felsite (Felstone). Same as foregoing, but granite absent. Omeo township, Gippsland.
- 36 Quartz-mica-diorite. Crystalline-granular, rather coarse-grained mixture of plagioclase, hornblende, mica, and quartz, the first predominating. From Kellbridge, Gippsland.
- 37 Diorite. Much affected by decomposition, and traversed by quartz veins. From the dyke of the Thomson River Copper Mining Company's mine, near Walhalla.
- 38 Diorite. Fine-grained; much altered by decomposition; finely impregnated with copper pyrites. From the dyke worked by the Thomson River Copper Mining Company, near Walhalla.
- 39 Quartz-mica-diorite. Coarsely crystalline-granular, strongly decomposed. From a dyke traversed by the auriferous Emu Reef, Alexandra.
- 39A Diorite. Medium and even-grained mixture of hornblende and plagioclase in pretty even proportion; rather strongly impregnated with iron pyrites. From a dyke at Cobyngbar River, twenty-five miles from Bendoc, Gippsland.
- 39B Diorite. Finely crystalline-granular; very hornblendic; finely impregnated with iron pyrites. From a dyke at Cobyngbar River, twenty-miles from Bendoc, Gippsland.
- 39c Diorite. Finely crystalline-granular; rendered porphyritic by impregnated crystals of calcite; slightly impregnated with iron pyrites. From a dyke at Cobyngbar River, twenty-five miles from Bendoc, Gippsland.
- 39D Diorite. Very finely crystalline-granular; rather hornblendic, and slightly impregnated with iron pyrites. From a dyke at Cobyngbar River, twenty-five miles from Bendoc, Gippsland.
- 39E Diorite. Extremely fine-grained, approaching "aphanite." From a dyke at Omeo township, Gippsland.
- 40 Diorite. Fine grained, highly felspathic, strongly affected by decomposition. Yarra Bank, between Botanic Gardens and Prince's Bridge, Melbourne.
- 41 Diorite. Finely granular; highly felspathic; affected by decomposition; finely impregnated with iron pyrites; one face coated with crystallised "bitterspar." Taken from a dyke traversed by auriferous quartz-veins (average yield of gold per ton, fourteen dwts.), at a depth of 115 feet. Durham Gully, Alexandra District.
- 42 Felspathic Diorite-Aphanite. Crypto-crystalline plagioclase-felspar base, with decomposed crystals of what appears to be hornblende. It is densely impregnated with long prismatic crystals

- of auriferous arsenical pyrites and some iron pyrites. Comes from a dyke, the so-called "Cohen's Reef," which is traversed by highly auriferous quartz veins. This rock changes in parts of the dyke to genuine fine grained diorite. Walhalla, North Gippsland.
- 43 Plagioclase-Felsite. Finely impregnated with crystals of iron pyrites. From a dyke which is traversed by highly auriferous quartz-veins. Union Company's Mine, Diamond Creek, Nillumbic.
- 43A Hornblende-Porphyrityte. Brown felsitic base with crystals of hornblende and plagioclase; slightly impregnated with iron pyrites. From a dyke near Dry Hill, Omeo, Gippsland.
- 44 Gabbro: (Schiller-spar Rock, Bastite?) Diallage (Schiller-spar?) with some serpentinous and a little felspathic matter; coarsely crystalline and slightly impregnated with grains of magnetic pyrites. From a dyke at Tabberabera, Gippsland.
- 44A Epidosite (Epidote-Rock). Very finely crystalline-granular mixture of epidote and quartz, the former predominating. From a dyke near Tongio, Gippsland.

NEWER IGNEOUS OR VOLCANIC ROCKS.

OLDER BASALT.

(Age between eocene and older pliocene tertiary).

- 45 Basalt. Dark bluish and brownish grey, very dense and compact. From Muntham, County of Dundas.
- 46 Basalt (Anamesite). Dark bluish grey, rich in fine grains of olivine; finely porous. From a creek between Hamilton and Cavendish.
- 47 Basalt (Dolerite). Vesicular in parts, and somewhat affected by decomposition; underlies miocene tertiary. Korkuperrimul, Werribee River.
- 48 Basalt. Bluish black, with very irregular hackly fracture; rendered porphyritic by larger and smaller grains and crystals of olivine; slightly decomposed on one face. Koonong Wootong Creek, Coleraine.
- 49 Basalt. Bluish black, very dense and compact; rich in, and rendered porphyritic by small grains and crystals of olivine. Koonong Wootong Creek, Coleraine.
- 50 Basalt (Anamesite). Bluish grey, and compact. Nodule from the centre of a large sphæroid decomposed in concentric layers from the surface towards the centre. King-street, Melbourne.
- 51 Basalt (Anamesite). Greenish black, very dense and compact; rich in, and rendered porphyritic by small grains of olivine. North Melbourne.
- 52 Basalt (Anamesite). Dense and compact; rendered porphyritic by small grains and crystals of olivine. Campaspe River, north of Kyneton.

- 53 Basalt (Anamesite). Dark greyish black, very dense and compact; shows porphyritic texture produced by abundant small grains and crystals of olivine; fracture hackly. Cape Schanck.
- 54 Basalt. Dark bluish black, very dense and compact; very rich in, and rendered porphyritic by small grains and crystals of olivine; highly magnetic, produced by abundant fine grains and crystals of titaniferous magnetite. From Stony Hut Creek, Blackwood.
- 55 Basalt. Dark bluish grey, very compact looking, though finely porous. Creek between Hamilton and Cavendish.
- 56 Basalt. Vesicular and strongly affected by decomposition; vesicles partly filled with "calcite." Creek south of Den Hills, Muntham.
- 57 Basalt. Of brecciated appearance due to partial decomposition. Pyramid Rock, south-east of Phillip Island.
- 58 Basalt. Highly vesicular, somewhat affected by decomposition. Underlies miocene tertiary. Korkuperrimul, Werribee River.
- 59 Basalt. Decomposed and amygdaloidal; amygdules filled with a whitish, soapstone-like, partly translucent mineral. From Stony Hut Creek, Blackwood.
- 60 Basalt. Decomposed to an impure brown iron ore. North Melbourne.
- 61 Basalt. Decomposed to a red, indurated, slightly amygdaloidal, soapy clay. From Stony Hut Creek, Blackwood.
- 62 Basalt (Anamesite). Decomposed to a white and reddish brown soapy clay, in which the outlines of the original constituents of the rock are still plainly observable; must have been rich in olivine and felspar. Flagstaff Hill, Melbourne.
- 63 Basalt. Entirely decomposed to a greyish white, earthy clay, coloured reddish by ferruginous matter. King-street, Melbourne.
- 64 Basalt. Entirely decomposed to a greyish white, earthy clay, with white veins, composed of silicates of magnesia and alumina. Flagstaff Hill, Melbourne.
- 65 Basalt. Entirely decomposed to a greyish white, earthy clay. Flagstaff Hill, Melbourne.
- 66 Basalt. Entirely decomposed to a somewhat soapy, brittle, bluish-grey and white mottled clay. Queen's Ferry, Western Port.
- 67 Basalt (Dolerite). Finely crystalline-granular, with porphyritic texture produced by grains and crystals of plagioclase; small grains and crystals of olivine are also pretty abundant. Morang.

NEWER BASALT.

(Age from pliocene tertiary to recent.)

- 68 Basalt. Very compact with patches of olivine. Daylesford.
- 69 Basalt. Very compact with patches of olivine. Daylesford.
- 70 Basalt. Slightly decomposed. From Daylesford.
- 71 Basalt. Mottled white, grey and black, through partial decomposition. Daylesford.

- 72 Basalt. Wholly decomposed. From Daylesford.
- 73 Basalt. Slightly decomposed ; from a large nodule. Daylesford.
- 74 Basalt. Decomposing into small granules. Daylesford.
- 75 Basalt. Vesicular and scoriaceous, strongly affected by decomposition. Daylesford.
- 76 Basalt (Ashy scoria). Neighbourhood of Wombat Hill (point of eruption), Daylesford.
- 77 Basalt. Mottled in various shades of grey through slight decomposition ; texture imperfectly slaty. Wombat Hill (point of eruption), Daylesford.
- 78 Basalt-Scoria. Neighbourhood of Wombat Hill (point of eruption.) Daylesford.
- 79 Basalt. Very dense and compact-looking. Crater of Mount Mercer.
- 80 Basalt. Very dense and compact-looking. Crater of Mount Mercer.
- 81 Basalt. Finely and closely vesicular. Crater of Mount Mercer.
- 82 Basalt. Finely and closely vesicular. Crater of Mount Mercer.
- 83 Basalt. Dark brownish and blackish grey ; full of small grains of olivine ; very compact looking, though slightly porous. Mount Mercer.
- 84 Basalt. Very dense and compact looking. From between Leigh River and Cargerie Creek.
- 85 Basalt. (Anamesite). Dark grey, texture close grained, contains a little olivine, and is suitable for building purposes. Specimen obtained from lower lava flow, Leigh River.
- 86 Basalt. (Anamesite). Compact looking, though finely and closely vesicular. From Cargerie Creek, Leigh River.
- 87 Basalt. (Anamesite). Compact looking, though finely and closely vesicular. From Cargerie Creek, Leigh River.
- 88 Basalt. (Anamesite). Compact looking, though finely and closely vesicular. From Cargerie Creek, Leigh River.
- 89 Basalt. (Anamesite). Finely vesicular. Cargerie Creek, Leigh River.
- 90 Basalt. (Anamesite). Highly vesicular. From Cargerie Creek, Leigh River.
- 91 Basalt. (Anamesite). Highly vesicular. From the upper flow, Leigh River.
- 92 Basalt (Anamesite). Rather compact. Green Hill, between Leigh River and Cargerie Creek.
- 93 Basalt. Vesicular, shows some hyalite in the vesicles. Green Hill, between Leigh River and Cargerie Creek.
- 94 Basalt. Slightly vesicular, otherwise similar to 93. Green Hill, between Leigh River and Cargerie Creek.
- 95 Basalt. (Anamesite) dark greyish, black and brown mottled. Cargerie Creek.
- 96 Basalt. Dark greyish black ; very compact ; finely porphyritic. From Green Hill, between Leigh River and Cargerie Creek.

- 97 Basalt. (Anamesite). Similar to 95, but more plainly crystalline-granular; minutely porous. Cargerie Creek.
- 98 Basalt-Ash-Conglomerate. Decomposed looking. Consists of basalt-ash, mixed with small pebbles, and grains of ironstone, quartz, &c. Leigh River.
- 99 Basalt. Grey and compact. Neighbourhood of Carisbrook.
- 100 Basalt. Slightly vesicular. Neighbourhood of Carisbrook.
- 101 Basalt. Grey and compact. Neighbourhood of Carisbrook.
- 102 Basalt. Finely vesicular. Neighbourhood of Carisbrook.
- 103 Basalt. Greyish black and finely vesicular. Neighbourhood of Carisbrook.
- 104 Basalt. Dark bluish grey and finely vesicular. Neighbourhood of Carisbrook.
- 105 Basalt. Dark blackish grey, rather vesicular; vesicles partly coated with carbonate of lime. From Simpson's Station, near Carisbrook.
- 106 Basalt. Compact and slightly porphyritic. From Horseshoe Hill, parish of Glengower.
- 107 Basalt. (Anamesite). Black, very compact. Tullaroop Creek, near Glengower.
- 108 Basalt. Spotted greyish white and black; fine hackly fracture; decomposes to a small gravel. Horseshoe Hill, Glengower.
- 109 Basalt. Blackish grey, rich in olivine. Top of Powlett's Hill, Glengower.
- 110 Basalt. Highly vesicular and slightly decomposed; some of the vesicles are filled with a greenish clayey substance. From below the bridge over Tullaroop Creek, Parish of Glengower.
- 111 Basalt. Prismatic structure; dense and scoriaceous. Top of Powlett's Hill, parish of Glengower.
- 112 Basalt. Bluish black and purplish brown mottled; very compact, with slaty structure, Glengower.
- 113 Basalt. (Anamesite). Dark blackish-grey and white finely mottled; minutely porous. From the west side of Tullaroop Creek, parish of Glengower.
- 114 Basalt. (Anamesite). Slightly vesicular. Tullaroop Rapids.
- 115 Basalt. (Anamesite). Brownish grey; slightly vesicular; somewhat affected by decomposition. From below the bridge over the Tullaroop Creek, Smeaton.
- 116 Basalt. Dark blackish grey and vesicular; vesicles pretty large. Tullaroop Creek, Glengower.
- 117 Basalt. Vesicular. Mount Moolort.
- 118 Basalt. (Anamesite). Dark blackish grey; finely porous with larger vesicles. Moolort.
- 119 Basalt-Scoria. Mount Elephant.
- 120 Basalt-Lava. Scoriaceous; encloses patches of olivine. Point of eruption of Mount Elephant.
- 121 Basalt-Scoria. Affected by decomposition; encloses patches of triclinic felspar. Point of eruption of Mount Elephant.

- 122 Basalt-Ash. Mixed with scoria; much decomposed. Point of eruption of Mount Elephant.
- 123 Basalt. Of slightly porphyritic aspect. Mount Lawaluc, an extinct volcano, near Mount Mercer.
- 124 Basalt. Scoria. From Mount Lawaluc.
- 125 Basalt. Blackish grey and compact. From Mount Lawaluc.
- 126 Basalt. Same as No. 125. Blackish grey and compact. Mount Lawaluc.
- 127 Basalt. (Anamesite). Compact; blackish grey; contains small patches of olivine. Mount Lawaluc.
- 128 Basalt. Dark brownish grey, compact and porphyritic. Mount Lawaluc.
- 129 Basalt. Slightly scoriaceous. Mount Shadwell.
- 130 Basalt. Vesicular, and rich in olivine. Mount Shadwell.
- 131 Basalt. Highly vesicular; slightly affected by decomposition. Mount Shadwell.
- 132 Basalt-Scoria (Basalt Pumice). Vesicles large, giving the specimen an appearance of a piece of honeycomb; floats in water. Point of eruption of Mount Shadwell.
- 133 Basalt-Scoria. Crater of Mount Franklin.
- 134 Basalt-Ash. Consolidated and enclosing particles of Scoria; greyish white mottled. Crater of Mount Franklin.
- 135 Basalt. (Anamesite). Shows large, irregular vesicles, and patches of triclinic felspar; slightly affected by decomposition. Crater of Mount Franklin.
- 136 Basalt-Scoria and Ash-Conglomerate. From near the crater of Mount Franklin.
- 137 Basalt-Scoria (Basalt Pumice). Very light; floats in water. Crater of Mount Franklin.
- 138 Basalt-Scoria. Encloses a fragment of sandstone. Crater of Mount Franklin.
- 139 Basalt. Slightly decomposed, with indistinct slaty structure. Deep Creek.
- 140 Basalt. Slightly vesicular. From a small outlier on the Deep Creek.
- 141 Basalt. Dark greyish black, with fine pores; slightly decomposed on one face. Section 3, Deep Creek.
- 142 Basalt. Black and greyish white, finely mottled and slightly vesicular. Deep Creek.
- 143 Basalt. Dark greyish black; compact looking, yet finely porous. Section 14, Deep Creek.
- 144 Basalt. Black and light greyish, finely mottled; compact. From Deep Creek.
- 145 Basalt. Greyish black; compact. Joyce's Creek.
- 146 Basalt. (Anamesite). Vesicular; vesicles fine and close. Junction of Loddon River and Middle Creek.
- 147 Basalt. Compact, with patches of olivine. Anakie Hills (points of eruption), near Geelong.
- 148 Basalt-Lava. Shows a woodlike, small prismatic structure. Anakie Hills.

- 149 Basalt-Agglomerate. Composed of granitic sand and basaltic lava particles. Point of eruption, second Anakie Hill.
- 150 Basalt-Ash-Conglomerate. More or less decomposed. Point of eruption, second Anakie Hill.
- 151 Basalt. Purple and black mottled; rendered porphyritic by crystals and grains of oligoclase and olivine. First Anakie Hill, near Geelong.
- 152 Basalt. Dark greyish black; finely porous and vesicular, and rendered highly porphyritic by crystals of olivine and triclinic felspar. Point of eruption, third Anakie Hill, near Geelong.
- 153 Basalt. Dark bluish grey; very compact, with veins of a greyish ashy nature; affected by decomposition; both the dense and the ashy portions are rich in grains and crystals of olivine and triclinic felspar. Second Anakie Hill, near Geelong.
- 154 Basalt-Ash-conglomerate. From second Anakie Hill, near Geelong.
- 155 Basalt-Ash-conglomerate. Layers of fine and coarse material, consisting of a great deal of granite-detritus. Foot of point of eruption of second Anakie Hill.
- 156 Basalt. Grey; very compact. Rocky Hill, Hepburn District.
- 157 Basalt. Greyish black, slightly vesicular and porphyritic. Top of a rocky hill, Hepburn District.
- 158 Basalt. Compact, dark greyish black, slightly vesicular. Termination of lower lava flow, Jim Crow Creek, near Yandoit.
- 159 Basalt. Black, highly vesicular, slightly affected by decomposition. From the upper layer of the termination of lower lava flow down Jim Crow Creek, near Yandoit.
- 160 Basalt. Dark greyish black, highly vesicular. Termination of lower lava flow. Jim Crow Creek, Yandoit.
- 161 Basalt. Highly vesicular, more or less decomposed; in contact with tertiary grit. Neighbourhood of Keilor bridge.
- 162 Basalt. (Anamesite). Very compact and rich in olivine. From a quarry near the bridge over Spring Creek, Keilor-road.
- 163 Basalt-Lava-Ash. Partly mixed with quartz grains. Bacchus Marsh.
- 164 Basalt-Lava-Ash. Partly mixed with quartz grains; rather consolidated and scoriaceous looking. Bacchus Marsh.
- 165 Basalt-Lava-Ash. Decomposed to a red clay, mixed with iron-stone pebbles. Occurs in compact basalt near Redesdale.
- 166 Basalt. (Anamesite). Vesicular and porous; the pores very fine and close. Redesdale Hotel, Redesdale.
- 167 Basalt. (Dolerite). Greyish and yellowish white finely mottled; finely crystalline-granular and compact; shows magnetic polarity. Redesdale.
- 168 Basalt. Scoriaceous and rich in olivine, oligoclase and hornblende; slightly affected by decomposition. From a hill near Powlett's Hill, Smeaton.
- 169 Basalt. (Anamesite). Dark blackish grey, very compact with slaty structure. From a creek south of Powlett's Hill.

- 170 Basalt. (Dolerite). Coarsely crystalline-granular; a loose aggregation of apparently imperfect crystals and grains of triclinic felspar and olivine; the latter more or less decomposed to a brownish ferruginous substance. From south-west of Powlett's Hill.
- 171 Basalt. Of ashy aspect, light brownish grey and finely porous. Powlett's Hill.
- 172 Basalt. Vesicular; vesicles fine; very rich in magnetic iron, and strongly affecting the magnetic needle. Magnet Hill, Baynton.
- 173 Basalt. Vesicular; vesicles close and small. Point of eruption near Baynton.
- 174 Basalt. Vesicular; vesicles small; slightly affected by decomposition. Point of eruption near Baynton.
- 175 Basalt. Dark greyish black, slightly vesicular; vesicles small. Point of eruption near Baynton.
- 176 Basalt. Greyish black, vesicular; vesicles very small; rendered porphyritic by crystals of oligoclase. From near Baynton.
- 177 Basalt. Dark greyish black and compact; highly magnetic. Volcanic Hill, preemptive section, Baynton.
- 178 Basalt. Dark greyish black; finely vesicular in bands or stripes. From near Baynton.
- 179 Basalt. Dark greyish black; very compact and magnetic. Magnet Hill, Baynton.
- 180 Basalt. Same as No. 179, but slightly vesicular. Magnet Hill, Baynton.
- 181 Basalt. Same as No. 179, but slightly vesicular. Magnet Hill, Baynton.
- 182 Basalt. Dark greyish black; finely porous, with hackly fracture. Point of eruption, near Baynton.
- 183 Basalt. Dark grey and white-mottled; very dense and compact. Magnet Hill, Baynton.
- 184 Basalt. Yellowish grey with black bands, compact, rich in titaniferous magnetic iron. Baynton.
- 185 Basalt. Blackish grey, compact, with a fine-hackly fracture; slightly porphyritic in parts. Point of eruption, near Baynton.
- 186 Basalt. (Anamesite). Blackish grey, very compact, rich in magnetic iron. From Magnet Hill, Baynton.
- 187 Basalt. (Anamesite). Slightly vesicular, vesicles small. Mia Mia, Spring Plains.
- 188 Basalt. Greyish black; finely vesicular in bands, the vesicles partly filled with carbonate of lime. Township of Mia Mia, Spring Plains.
- 189 Basalt. Dark brownish black mottled; slightly vesicular. From a basaltic escarpment, sec. 44, Spring Plains.
- 190 Basalt. Dark blackish and brownish-grey mottled; very compact looking, though finely porous, and showing sparingly large vesicles, partly coated with carbonate of lime. Sec. 44, Spring Plains.

- 191 Basalt. (Anamesite). Very dense and compact. From Simpson's Preemptive Section, Sutton Grange.
- 192 Basalt. Bluish grey; compact and hard; in places nodular and weathering, with a brown mammillated surface. Section 17, Sutton Grange.
- 193 Basalt. (Dolerite.) Finely crystalline-granular; affected by decomposition. Sutton Grange.
- 194 Basalt-Lava and Ash-Conglomerate. M'Donald's Hill, Clunes district.
- 195 Basalt-Ash. From M'Donald's Hill (point of eruption) Clunes district.
- 196 Basalt. Dark-bluish and greenish-black; highly vesicular, vesicles rather compressed looking in lines. Top of M'Donald's Hill.
- 197 Basalt-Sand and Ash. Slightly consolidated. M'Donald's Hill.
- 198 Basalt. (Anamesite). Of dark bluish grey colour; compact, close-grained, and rendered porphyritic by crystals and grains of triclinic felspar and olivine. From a dyke forming the eastern wall of a quartz-reef on Little Red Hill, opposite Church's Flat, Fryer's Creek.
- 199 Basalt. (Anamesite). Very compact and rendered porphyritic by crystals of olivine. From a dyke forming the eastern wall of a quartz reef on Little Red Hill, opposite Church's Flat, Fryerstown.
- 200 Basalt-Ash-Conglomerate. Turkey Hill, Clunes district.
- 201 Basalt-Scoria. Some of the vesicles are coated with hyalite. Point of eruption near Clunes.
- 202 Basalt-Scoria. From a volcanic vent in the neighbourhood of Clunes.
- 203 Basalt. Black, compact and rendered slightly porphyritic by crystals of triclinic felspar, olivine, and a tachylite-like mineral. From the highest point of M'Donald's Hill (point of eruption), Clunes district.
- 204 Basalt. Earthy and decomposed; slightly vesicular. Clunes district.
- 205 Basalt. Black, compact and slightly porphyritic; partly red through decomposition. From Buttlejork, north of Mount Aitken.
- 206 Basalt (Dolerite). Dark greyish black, compact and porphyritic; rich in olivine. Dandenong Ranges.
- 207 Basalt. Mottled blackish grey; very compact; structure slaty. The rock *in situ* resembles in fact an altered slate having in places a regular dip and strike, but varying in all directions. From near Kyneton.
- 208 Basalt. (Anamesite). Light grey, slightly vesicular and rendered porphyritic by crystals and grains of olivine. From the top of an old crater near Smeaton Hill.
- 209 Basalt-Scoria. Affected by decomposition. Smeaton Hill.
- 210 Basalt. (Anamesite). Dark greyish black; finely porous with some large vesicles. From Fauefield, Upper Plenty district.

- 211 Basalt. Dark blackish grey and vesicular; vesicles both large and small in size. From Parish of Newham.
- 212 Basalt. Dark blackish grey, very dense and compact; slightly porphyritic. From a hill near Newham.
- 213 Basalt. Dark bluish grey, very dense and compact. Parish of Newham.
- 214 Basalt. Grey, very compact, and rendered highly porphyritic by crystals of felspar and olivine. From Wattle Hill, Carlsruhe, Parish of Newham.
- 215 Basalt. Same as No. 214.
- 216 Basalt. (Anamesite). Dark grey, highly vesicular; a portion of the vesicles being coated with carbonate of lime. From Kangaroo Hill, south of Vaughan.
- 217 Basalt. (Anamesite). Dark grey, and rendered highly porphyritic crystals and grains of plagioclase and olivine; slightly vesicular, the vesicles being partly coated with carbonate of lime. Tullaroop Creek, Majorca.
- 218 Basalt. (Anamesite). Dark blackish grey, very compact looking, though slightly porous. From Collard's farm, valley of Loddon River.
- 219 Basalt. (Anamesite). Greyish white and greyish black mottled; vesicular; vesicles small. From Guildford Hill, Guildford.
- 220 Basalt. Dark blackish grey, finely porous and of earthy aspect. Merri Creek.
- 221 Basalt. Greyish black and grey in bands; finely porous; shows large grains of olivine. Richmond quarries, near Melbourne.
- 222 Basalt. (Anamesite). Very compact; contains hornblende. From the neighbourhood of Ballarat.
- 223 Basalt. Dark greenish black, dense and compact, very brittle; somewhat affected by decomposition. From a dyke accompanying the auriferous Garden Gully Reef, Pandora Company's mine, Sandhurst.
- 224 Basalt. From a depth of 676 feet on the same dyke as No. 225, Victoria Gold Mining Company, Sandhurst.
- 225 Basalt. Black and very compact. From a dyke 22 inches in thickness, accompanying the Victoria Reef at a depth of 810 feet, Sandhurst.
- 226 Basalt. Entirely decomposed to a grey soapy clay. From a dyke at Kangaroo Flat, Sandhurst.
- 227 Basalt. Entirely decomposed to a white clay. From same dyke as No. 226, Kangaroo Flat, Sandhurst.
- 228 Basalt. Much decomposed. From the cutting of the Big-hill Railway Tunnel, Sandhurst.
- 229 Basalt. Black, very compact, dense, hard and brittle, with flat conchoidal fracture, resembling Lydianstone; vesicular round one face; contains minute grains of olivine porphyritically dispersed. Used by the natives for fashioning their cutting implements. An analysis by Mr. J. Cosmo Newbery gave

the following results: 5 per cent. soluble in hydrochloric acid:—

	Soluble Portion.	Insoluble Portion.
Silica - - -	34·80	63·39
Alumina - - -	38·58	16·11
Manganese protoxide-	trace	1·01
Iron sesquioxide -	18·07	10·03
Lime - - -	7·12	5·26
Magnesia - - -	trace	3·41
Potash {	—	2·21
Soda }		
Titanic acid - -	—	0·63
Water - - -	1·43	—
Oxide of copper -	—	trace
	<hr/> 100·00	<hr/> 102·05

East Bank of Coliban River, parish of Tylden.

- 230 Basalt. Black, very dense and compact, of the aspect of Lydian-stone; rendered slightly porphoritic by crystals of olivine; vesicular on one face. This stone resembles No. 229, but is not quite so dense. The natives of Australia use it also for fashioning their cutting implements. From Bacchus Marsh.
- 231 Basalt-Ash-Conglomerate. Consists of a mixture of basalt scoria, fragments of slate, sandstone, quartz, &c., cemented by a greyish brown, indurated, volcanic ash. Hardie's Hill, near Chryseis Gold Mining Company's works, Durham Lead, Ballarat.
- 232 Basalt. (Anamesite). Dark blackish grey, very compact and rendered slightly porphyritic by crystals and grains of augite and olivine. From Hardie's Hill, near Chryseis Gold Mining Company's works, Durham Lead, Ballarat.
- 233 Basalt-Ash-Conglomerate. Consists of a mixture of basaltic scoria, fragments of slate, sandstone, quartz, &c., cemented by an indurated ash. From Hardie's Hill, Ballarat district.
- 234 Basalt. Dark greyish black; vesicular and more compact portions in obscure laminations. From Hardie's Hill, Ballarat district.
- 235 Basalt. Entirely decomposed. From near Gisborne.
- 236 Basalt. (Anamesite). Dark grey, very compact looking, though finely porous; rich in grains of olivine. Hassel's Creek, between Coleraine and Balmoral.

AQUEOUS ROCKS.

LOWER PALÆOZOIC.

LOWER SILURIAN.

(Including rocks of this age metamorphosed by contact with granite and other igneous rocks.)

- 237 Mica Schist. Goodman's Creek, Bacchus Marsh.
- 238 Mica Schist. Consists of silvery-white mica and quartz. From west of Leigh River, Hardie's Hill, Ballarat district.
- 239 Argillaceous Mica Schist (Phyllite). Greenish-grey, finely wrinkled with slight satiny lustre. From near felsite-perphyry, Dargo Hill, Mayford, Gippsland.

- 240 Argillaceous Mica Schist (Phyllite). Interlaminated with quartz in grains and thin layers. From the boundary of the granite and lower silurian, Hardie's Hill, Ballarat district.
- 241 Argillaceous Mica Schist (Knotted Micaceous Schist). From the boundary of the granite, Kingower.
- 242 Metamorphic Sandstone (Hornfels). Very fine-grained; extremely hard and dense. From the Eaglehawk Union Company's mine, depth 705 feet, Maldon.
- 242A Metamorphic Sandstone. Very fine-grained and finely micaceous. From the junction of the granite and lower silurian, Cherub, Hopkins' Hill.
- 243 Metamorphic Sandstone. Knotted, micaceous; finely mottled blackish-green and light brown. From the granite boundary, Sutton Grange.
- 244 Metamorphic Sandstone (Hornfels). Black, finely crystalline-granular, and highly quartzose. From the western wall of the Nuggety Reef, close to the granite boundary, Maldon.
- 245 Metamorphic Schist. Dark green and greyish-white mottled; micaceous. From near the granite boundary, Mount Jeffcot.
- 246 Breccia. Composed of quartz, slate and sandstone, the first predominating; highly ferruginous. From the neighbourhood of Newstead.
- 247 Breccia. Composed of dense, fine-grained sandstone and quartz; highly ferruginous; one face with a mammillated surface apparently water-worn. From Clunes Road, near Middle Creek.
- 248 Quartz-Breccia. Composed of large fragments of quartz, cemented by impure brown iron-ore. Sutton Grange.
- 249 Quartz-Breccia. Large fragments of quartz cemented by a felspathic base. Sutton Grange.
- 250 Quartz-Breccia. Large and small fragments of quartz cemented by granitic detritus. From near the granite boundary, Sutton Grange.
- 251 Quartz-Breccia. Coarse and fine quartz-sand and irregular fragments of quartz cemented by a siliceous base. Newham.
- 252 Sandstone-Breccia. Highly ferruginous. Deep Creek, Parish of Moolort.
- 253 Quartz-Grit. Very coarse and ferruginous. Joyce's Creek.
- 254 Quartz-Grit. Highly ferruginous. Bryant's Island, Loddon River.
- 255 Quartzite (Quartz-rock). Dark greenish-grey and fine-granular; slightly impregnated with iron pyrites. From the 676-feet level of the Victory Gold Mining Company's Mine, Garden Gully Reef, Sandhurst.
- 256 Quartzite (Quartz-rock). Fine-granular; impregnated with iron pyrites. From the 500-feet level of the Victory Gold Mining Company's Mine, Garden Gully Reef, Sandhurst.
- 257 Quartzite (Quartz-rock). Finely crystalline-granular and porous. From Joyce's Creek, near Campbelltown.
- 258 Quartzite. (Quartz-rock). Blackish grey, fine-granular, very hard. Forms the wall at the 760 feet level of the Victoria Reef, Sandhurst.

- 259 Quartzite (Quartz-rock). In parts micaceous. From the range near Joyce's Creek township.
- 260 Quartzite (Quartz-rock). Similar to foregoing, but more micaceous. Leigh River, Ballarat district.
- 261 Quartzite (Quartz-rock). Dark grey, fine-granular and hard. Chryseis G. M. Company's Mine, Durham Lead, Leigh River, Ballarat district.
- 262 Sandstone. Dark greenish-grey, very fine-grained, with slaty texture; highly quartzose and micaceous; associated with quartz, and impregnated with iron and magnetic pyrites. Forms the wall of the Garden Gully Reef at a depth of 510 feet in the Cornish Gold Mining Company's Mine, Sandhurst.
- 263 Sandstone. Grey, very fine-grained, highly quartzose, and micaceous. From a depth of 200 feet in the Great Britain Company's Mine, Sandhurst.
- 264 Sandstone. Highly quartzose and impregnated with iron pyrites; might be called a *quartzite*. From a depth of 315 feet in the Great Britain Company's Mine, Sandhurst.
- 265 Sandstone. Greenish-grey, fine-grained, highly quartzose and micaceous. From the 860 feet level, Victoria Reef, Sandhurst.
- 266 Sandstone. Light grey, fine-grained, micaceous and strongly argillaceous, with slaty texture. Ballarat district.
- 267 Sandstone. Gritty and ferruginous, Joyce's Creek, near Campbelltown.
- 268 Sandstone. Greenish-grey, fine-grained and highly quartzose, with slaty texture. From Calland's farm, Loddon River, near Mount Tarrengower.
- 269 Sandstone. Drab-coloured, fine-grained, slightly micaceous. Campbelltown.
- 270 Sandstone. Greyish-white; highly micaceous; texture slaty. Duke of Cornwall Gold Mining Co.'s Mine, Leigh River.
- 271 Sandstone. Rather coarse-grained, ferruginous and slightly micaceous; traversed by quartz-veins. Eddington.
- 272 Sandstone. White, highly felspathic, gritty, and soft. Smeaton Plains.
- 273 Sandstone. Brown-banded, ferruginous and micaceous; texture slaty. Exploration Reef, Loddon River, near Eddington.
- 274 Sandstone. Brownish-grey, medium-grained, quartzose. From south side of Hardie's Hill, Ballarat district.
- 275 Sandstone. Light brownish grey, argillaceous and micaceous; texture slaty. From the range east of Joyce's Creek.
- 276 Sandstone. Light pinkish grey, fine grained, rather argillaceous and slightly micaceous. From near Eddington.
- 277 Sandstone. Drab-coloured, somewhat felspathic. Sandy Creek, near Maldon.
- 278 Sandstone. Cream-coloured, fine-grained, highly argillaceous and micaceous. Loddon River, near Baringhup.
- 279 Sandstone. Grey, fine-grained, micaceous, with slaty texture. From the City of Manchester Co.'s Mine.

- 280 Sandstone. Light brownish-yellow, very fine-grained, and argillaceous. Joyce's Creek, near Campbelltown.
- 281 Sandstone. Micaceous and ferruginous; texture imperfectly slaty. From the neighbourhood of Grenville.
- 282 Sandstone. Brownish-yellow, soft, micaceous, and rather argillaceous. From Pearson's farm, Joyce's Creek, near Campbelltown.
- 283 Sandstone. Greenish-grey, fine-grained, micaceous, with slaty texture. Chriseis G. M. Co.'s Mine, Durham Lead, Leigh River.
- 284 Sandstone. Grey, fine-grained, rather soft and argillaceous. Joyce's Creek.
- 285 Sandstone. Yellow, fine-grained, rather soft and argillaceous. Gully near Hardie's Hill, Ballarat district.
- 286 Sandstone. Pinkish-brown, rather argillaceous and micaceous. From the range near Joyce's Creek township.
- 287 Sandstone. Yellowish-white, felspathic and slightly micaceous; texture slaty. Exploration Reef, Loddon River, near Eddington.
- 288 Sandstone. Dark grey, highly quartzose, hard, and somewhat felspathic. Coliban River, near Malmsbury.
- 289 Sandstone. Brown, fine-grained, and micaceous. Williamson's Creek.
- 290 Sandstone. Fine-grained, yellow and brown-banded, micaceous and argillaceous. Joyce's Creek, near Campbelltown.
- 291 Sandstone. Brownish-yellow, fine-grained, rather soft, argillaceous and micaceous, with slaty texture. Grenville.
- 292 Sandstone. Purplish-grey, very fine-grained and micaceous. Pearson's Farm, near Campbelltown.
- 293 Sandstone. Fine-grained, argillaceous and slightly micaceous; in parts ferruginous. Road between Carisbrook and Eddington.
- 294 Sandstone. White and brown mottled, rather coarse-grained, very soft and argillaceous. Loddon Creek, Moolort.
- 295 Sandstone. Yellowish-white, soft, and highly argillaceous. Bryant's Island, Loddon River.
- 296 Sandstone. Light pinkish-brown, fine-grained, rather quartzose. Loddon River, near Eddington.
- 297 Sandstone. White and brownish-red mottled, very soft, with slaty texture. Powlett's Hill.
- 298 Sandstone. Fine-grained and ferruginous; fracture very uneven. Bulla Bulla.
- 299 Sandstone. Ferruginous and micaceous; traversed by quartz-veins. Daylesford.
- 300 Sandstone. Very quartzose; in parts rather coarse-grained; traversed by quartz-veins. Daylesford.
- 301 Sandstone. Highly ferruginous, some portions consisting of pure brown iron ore. Daylesford.
- 302 Sandstone. Bluish-grey, very fine-grained, and impregnated with grains and crystals of iron-pyrites; associated with greyish fissile slate. From the 900 feet level of the Hustler's Company's Mine, Hustler's Reef, Sandhurst.

- 303 and 303A Slate. Dark greyish-blue and rather soft ; shows various species of graptolites (*Phyllograptus*, &c.). From the Fearnought Claim, Daylesford.
- 304 Slate. Dark brownish-grey, rather fissile, with slight satiny lustre on cleavage faces ; fracture rough-conchoidal. From the 650 feet level of the Victory Gold Mining Company's Mine, Garden Gully Reef, Sandhurst.
- 305 Slate. Greenish-black, cleavage uneven ; associated and highly impregnated with iron pyrites. From near a quartz-reef at Bradford.
- 306 Slate. Greyish-green and greyish-black mottled ; cleavage very uneven ; slightly impregnated with iron pyrites. Forms the walls at the 800 feet level of the Garden Gully Reef, Sandhurst.
- 307 Slate. Dark bluish-grey, and rather soft, resembling mudstone ; impregnated with iron pyrites. Castlemaine.
- 308 Slate. Dark greyish-blue ; cleavage irregular ; rather shaly in character and impregnated with iron pyrites. From range east of Joyce's Creek.
- 309 Slate. Light greenish-grey ; cleavage very irregular. From near Grenville.
- 310 Slate. Light bluish-grey ; cleavage imperfect. Williamson's Creek, five miles north-east of Mount Mercer.
- 311 Slate. Light pinkish-brown, rather soft ; cleavage irregular. From a tunnel at Joyce's Creek.
- 312 Slate. Rather soft and arenaceous ; cleavage uneven. Neighbourhood of Guildford.
- 313 Slate. Brownish-red ; shows impressions of graptolites. Spring Plains.
- 314 Slate. Highly quartzose ; might be called a "slaty quartzite ;" traversed by a small quartz-vein. Hardie's Hill, Leigh River, Ballarat district.
- 315 Slate. Highly ferruginous ; traversed by thin veins of brown iron-ore. Eddington.
- 316 Slate. Highly ferruginous, and presenting a brecciated appearance. Joyce's Creek.
- 317 Slate. Highly ferruginous, quartzose and concretionary ; forms irregular bands in common grey slate. From the neighbourhood of Newstead.
- 318 Slate. Highly ferruginous, and associated with quartz-veins. From near a quartz-reef at Bradford.
- 319 Slate. Greenish and brownish-grey, siliceous and strongly impregnated with iron pyrites. Forms the wall-rock of the Albion Reef, Stawell.
- 320 Slate. Greyish-white, rather soft. Sandy Creek, Maldon.
- 321 Slate. Yellowish-white, soft and argillaceous. Williamson's Creek, Leigh River, Ballarat district.
- 322 Slate. Bluish-grey, rather soft and argillaceous. Powlett's Hill, Smeaton district.
- 323 Slate. Light brownish-grey, very soft and argillaceous ; might be called a "mudstone." From a gully near Hardie's Hill, Ballarat district.

- 324 Slate. Light greenish-grey, with slight satiny lustre; cleavage irregular. Eagle Tavern, Campbell's Creek, near Castlemaine.
- 325 Mudstone. Finely-banded red and white. Pebble from the older gold drift of the Black Hill, Ballarat.
- 326 Mudstone. White, very soft and argillaceous. From near Joyce's Creek.
- 327 Mudstone (Mudslate). Bluish-grey, highly argillaceous; strongly impregnated with iron pyrites. Leigh Company, Durham Lead, Ballarat district.
- 328 Same as No. 327.
- 329 Mudstone. Soft and highly argillaceous. Sandhurst.
- 330 Mudstone. White, with fine yellow bands; highly argillaceous and soft. Grenville.
- 331 Shale. Reddish-grey, with slaty texture. Castlemaine.
- 332 Shale. Dark bluish-grey, highly argillaceous; shows impressions of graptolites. From the neighbourhood of Muckleford.
- 333 Carbonaceous (Graphitic) Clay (Slickenside). Forms at the 800 feet level the casing of the Garden Gully Reef, Sandhurst.

UPPER SILURIAN.

(Including rocks of this age metamorphosed by contact with granite, &c.)

- 334 Cornubianite? Gneissose rock composed of much mica and quartz. From the boundary of the granite and silurian near Bright.
- 335 Breccia. Composed of sandstone, slate, &c., cemented by a felspathic base. From close to a felsite dyke at Keelbundora.
- 336 Breccia. Fragments of quartz, hornstone, &c., cemented by felspathic matter. From near the granite boundary, Beechworth.
- 337 Conglomerate. Fossiliferous and full of pores and cavities which have mostly arisen through the removal of fossils. From the head of Turton's Creek, Gippsland.
- 338 Quartzite. Rather coarse-gritty. Part of a pebble derived from drift near Templestowe.
- 339 Quartzite. Very porous; shows casts of fossils, and some of the pores and hollows are evidently due to the removal of their substance. Fossil Reef, near Rushworth.
- 340 Sandstone. Coarse-grained, rather gritty, and full of casts of fossils. From Raspberry Creek, Woods Point district.
- 341 Sandstone. Micaceous, ferruginous and brecciated-looking; full of casts of fossils. From Royal Park, Melbourne (two specimens).
- 342 Sandstone. Black and white-mottled; fine-grained, micaceous, and rather soft. From the Botanic Gardens, Melbourne.
- 343 Sandstone. Fine-grained greyish-white and brown, and rather soft. From near the Public Library, Melbourne.
- 344 Sandstone. Fine-grained, micaceous, and very quartzose. From near the Public Library, Melbourne.
- 345 Sandstone. Fine-grained and micaceous; shows casts of fossils. From near the Public Library, Melbourne.

- 346 Sandstone. Light brownish-grey, rather coarse-grained and slightly micaceous. From Latrobe-street, Melbourne.
- 347 Sandstone. Rather soft and argillaceous, and slightly micaceous. From near the Supreme Court, Melbourne.
- 348 Sandstone. Brown, fine-grained; micaceous, and rather soft. Sydney Road, near Melbourne.
- 349 Sandstone. Drab-coloured, fine-grained, and micaceous. Greensborough.
- 350 Sandstone. Greyish-yellow, fine-grained, and micaceous. Heidelberg.
- 351 Sandstone. Fine-grained and micaceous; might be called an indurated sandy shale. From Boroondara.
- 352 Sandstone. Yellowish-white; appears rather argillaceous; traversed by auriferous quartz-veins. From the Fossil Reef, near Rushworth.
- 353 Sandstone. Grey and brown-banded, pretty coarse-grained structure slaty. Wall rock of the Outward-bound Reef. Alexandra district.
- 354 Sandstone. Light greyish-white, fine-grained, highly quartzose and slightly micaceous; traversed by quartz veins. Ringwood.
- 355 Sandstone. Fine-grained, micaceous, with irregular brown ferruginous bands. Keelbundora.
- 356 Sandstone. Fine-grained, of somewhat slaty texture, and highly quartzose; shows casts of fossils. From near Heathcote.
- 357 Sandstone. Same as foregoing, but more ferruginous. Heathcote.
- 358 Sandstone. Brownish-grey, fine-grained, rather soft and micaceous; shows on one face imperfect casts of fossils. From the range east of Heathcote.
- 359 Sandstone. Similar to foregoing. From the neighbourhood of the township of Heathcote.
- 360 Sandstone. Of gritty texture; might be called a quartz-grit; in parts conglomeratic, through enclosed small rounded pebbles of quartz; shows casts of fossils. From the Heathcote district.
- 361 Sandstone. Greyish-white, fine-grained and highly quartzose; might be called a quartz rock; full of casts and impressions of fossils. From the township of Heathcote.
- 362 Sandstone. Highly quartzose and full of casts of fossils. From the Heathcote district.
- 363 Sandstone. Light grey and greyish-white banded, very fine-grained, argillaceous and micaceous; shows an obscure slaty texture. From the Plenty River, near Greensborough.
- 364 Sandstone. Greenish-grey and very fine-grained; traversed by thin veins of quartz and calcite. From the hanging wall of the cupriferous diorite dyke of the Thomson River Copper Mine, near Walhalla, Gippsland.
- 365 Slate. Bluish-grey; cleavage imperfect. From the wall of the Fiery Reef, Alexandra district.
- 366 Slate. Cleavage imperfect; in parts ferruginous. From the neighbourhood of Stockyard Creek Diggings, Gippsland.
- 367 Slate. Thick-bedded; cleavage uneven; rather arenaceous; fossiliferous. From Starvation Creek, Warburton.

- 368 Slate. Same as the foregoing.
- 369 Shale. Dark grey and greyish-brown-banded and micaceous. From Diamond Creek, near Nillumbic.
- 370 Shale (Mudstone). Arenaceous and micaceous. From Boroon-dara.
- 371 Shale. Dark bluish-grey, rather silicious and hard; impregnated with iron pyrites. From the western wall of the Welcome Reef, Alexandra district.
- 372 Limestone. Light grey, very finely crystalline-granular, almost dense in parts. From Yering.
- 373 Limestone (Marble). Coarsely and finely crystalline-granular, nearly dense portions irregularly mixed; variegated in shades of grey, black and white. From Mount Camel, Heathcote.
- 374 Clay. Black, carbonaceous, slickensided. From the casing of the foot wall, at a depth of 190 feet, of the Thomson River Copper Lode, near Walhalla, Gippsland.

UPPER PALÆOZOIC.

- 375 Conglomerate. Pebbles of silicious sandstone, quartz, &c., loosely cemented by an argillaceous base. From Robertson's Station, Wild Duck Creek, near Heathcote.
- 376 Conglomerate. Rather loose; coarse and fine pebbles intermixed. From the Wild Duck Creek, Spring Plains, near Heathcote.
- 377 Conglomerate. Similar to No. 376. Same locality.
- 378 Sandstone. Very coarse-grained and gritty, with narrow and coarser-grained bands alternating with broader and finer-grained ones; structure flaggy. From near Hexham.
- 379 Sandstone. Same as foregoing.
- 380 Sandstone. Very coarse-grained and in parts ferruginous. From Hopkins' Hill, near Hexham.
- 381 Sandstone. Whitish-gray, with fine brown bands, rather coarse-grained and quartzose; one face shows a layer of fine conglomerate. From Johnson's station, on the Coliban River, near Kyneton.
- 382 Sandstone. Brown, fine-grained, micaceous, and somewhat calcareous. From the shores of Lake Tyers, Gippsland.
- 383 Sandstone. Black, fine-grained, highly silicious and slightly micaceous; texture imperfectly slaty. From Mount Timbertop, Gippsland.
- 384 Sandstone. White, coarse-grained and gritty. Gippsland.
- 385 Sandstone. Light pinkish-brown and highly quartzose. From the neighbourhood of Ballan.

MESOZOIC—CARBONACEOUS.

- 386 Sandstone. Fine-grained, rich in impressions of fossil plants and carbonaceous particles. From Den Hill Creek, Wannon.
- 387 Sandstone. White, very soft and argillaceous; might be called an indurated clay. From Hurdy Gurdy, Western Port.
- 388 Sandstone. Grey, soft and fine-grained, with fossil plant-impressions. From Cape Patterson.

- 389 Sandstone. Drab-coloured and rather gritty. From Geelong.
 390 Sandstone. Light brown and rather felspathic; shows imperfect impressions of fossil plants. From the Barrabool Hills, near Geelong.
 391 Sandstone. Fine-grained, light pinkish-grey; used as a building stone, but rather soft. From Bacchus Marsh.
 392 Sandstone. Brown, ferruginous and argillaceous, with fossil plant-impressions. From Western Port.
 393 Clay-Shale. Grey, full of fossil plant-impressions. From Griffith's Point. Western Port.
 394 Clay-Shale. From Cape Patterson.
 395 Clay-Shale. Shows fossil plant-impressions. From Cape Patterson.
 396 Clay-Shale. Full of carbonaceous particles and fossil plant-impressions. From Cape Patterson.
 397 Coal. From the Queen Seam, Cape Patterson. An analysis of it gave:—

Volatile matter	...	...	28.8
Fixed carbon	...	...	56.4
Hygroscopic water	...	...	4.0
Ash	...	...	10.8
			<hr/>
			100

- 398 Same as foregoing. Queen Seam, Cape Patterson.
 399 Same as foregoing. Queen Seam, Cape Patterson.
 400 Coal. Cape Patterson.
 401 Coal. Cape Patterson.
 402 Coal. From the so-called Rock-vein, Cape Patterson.
 403 Coal. Bourne Creek, Cape Patterson.
 404 Coal. Griffith's Point, Western Port.
 405 Coal. Bass' Ranges, Gippsland.
 406 Coal. Traralgon, Gippsland.
 407 Coal. From a creek near Latrobe River, Gippsland.
 408 Coal. Rokewood.
 409 Coal. Rokewood.
 410 Coal. Loutit Bay.
 411 Coal. Wormbete Ranges.
 412 Coal. Cape Patterson.

TERTIARY.

- 413 Quartz-Breccia. Fragments of quartz bound together by a silicious cement. From Flemington, near Melbourne.
 414 Breccia. Angular fragments of quartzose sandstone, &c., rather loosely cemented by highly ferruginous, reddish brown, vesicular clay (altered basaltic ash). From near the basalt crater of Mount Franklin, near Yandoit.
 415 Quartz-Conglomerate (Gold Diggers' Cement). Highly auriferous, with portion of the silurian bottom rock attached. Bonshaw Company's Mine, near Ballarat.

- 416 Conglomerate. Larger and smaller pebbles of quartz and quartzite, with sand cemented by impure brown iron-ore. La Rose Estate, Moonee Ponds.
- 417 Pisolitic Iron-ore Conglomerate. M'Donald's Hill, Clunes district.
- 418 Conglomerate. Mainly composed of pisolitic iron-ore. From Merri Creek, near Melbourne.
- 419 Conglomerate. Pebbles and fragments of basaltic scoria and quartz embedded in cemented granitic detritus. From the neighbourhood of the Anakie Hills, Geelong district.
- 420 Conglomerate. Pebbles of sandstone, slate, quartz, &c., rather loosely cemented by a sandy base. From the second or newer gold-drift at Fryerstown.
- 421 Conglomerate. Composed of sub-angular fragments of quartz, sandstone, slate, &c., cemented by a ferruginous base. From Smeaton Hill.
- 422 Grit. Very coarse and felspathic; represents indurated granite detritus. From the base of the Anakie Hills, Geelong district.
- 423 Quartz-grit. Coarse and fine mixed; micaceous; represents apparently cemented granite detritus. From the neighbourhood of the Anakie Hills, Geelong district.
- 424 Quartz-grit. Very coarse grains, and small pebbles of quartz cemented by impure brown iron-ore. From the Royal Park, near Melbourne.
- 425 Quartz-grit. Very coarse and ferruginous. From Moonee Ponds, near Melbourne.
- 426 Quartz-grit. (Conglomerate). Coarse, and fine, rounded grains, and small pebbles of quartz cemented by a little ferruginous matter. From the older gold-drift, Sandhurst.
- 427 Grit. Coarse, ferruginous, and slightly micaceous; represents cemented granite detritus. From the boundary of the granite and lower silurian, Elphinstone.
- 428 Sandstone. Gritty; highly ferruginous, and full of casts of fossils. From the Royal Park, near Melbourne.
- 429 Sandstone. The same as No. 428. Royal Park, near Melbourne.
- 430 Sandstone. Coarse-grained, gritty and ferruginous; full of sphaeroidal, ferruginous concretions. From the cemetery, Maldon.
- 431 Sandstone. Ferruginous, densely filled with casts of fossils. Mordialloc.
- 432 Sandstone. Brown, ferruginous, gritty in parts and fossiliferous. Mordialloc.
- 433 Sandstone. Calcareous and ferruginous; densely filled with fossils. Mordialloc.
- 434 Sandstone. Brown, medium-grained and highly ferruginous. Brighton.
- 435 Sandstone. Brown, ferruginous and soft; might be called compacted sand. From Brighton, near Melbourne.
- 436 Sandstone. Brown and highly ferruginous. From between St. Kilda and Brighton, near Melbourne.
- 437 Sandstone. Highly ferruginous; in connection with quartz-conglomerate. Flemington.

- 438 Quartzite. Very fine-granular. Lillydale.
- 439 Clay-shale. Full of fossil plant-impressions. From a thin layer in the older gold-drift of Daylesford.
- 440 Clay. Has a strongly soapy feel. From the banks of the Coliban River, near Taradale.
- 441 Limestone. Apparently mainly composed of comminuted shells. From the neighbourhood of Keilor.
- 442 Limestone. Ferruginous and highly fossiliferous. From Geelong.
- 443 Limestone. Rather loose and porous; mainly composed of comminuted fossils. From the valley of the Moorabool River, near Geelong.
- 444 Limestone. Very loose and friable; mainly composed of comminuted polyzoa. From Indented Heads, near Queenscliff, Port Phillip.
- 445 Limestone. Dense, grey, full of fossils. From Schnapper Point, Port Phillip.
- 446 Limestone. Rather soft and ferruginous; full of fossils. From Mordialloc.
- 447 Limestone. Rather sandy, but hard; full of fossils. From Mordialloc.
- 448 Freshwater-limestone. From Bryant's station on the Loddon River, near Maldon.
- 449 Lignite (Brown coal). Encloses particles of fossil resin. From a deposit 120 feet in thickness at Lal Lal, near Ballarat.
- 450 Lignite. (Earthy brown coal). From the Cape Otway district.
- 451 Lignite. From an auriferous deep lead at Daylesford.
- 452 Lignite. From an auriferous deep lead at Smythesdale.
- 453 Infusorial Earth. From a deposit four feet in thickness at Amherst, near Talbot.

COLLECTION OF MINERAL SPECIMENS.

- 454 Gold in Quartz, associated with Iron Pyrites. From the 700 feet level in the Victoria Reef, Sandhurst.
- 455 Gold, associated with Iron Pyrites in Quartz. From the North Cross Reef, Stawell (Pleasant Creek).
- 456 Gold in Quartz. From a greater depth in the reef than No. 455, North Cross Reef, Stawell (Pleasant Creek).
- 457 Gold, in filamentous particles enclosed in rock crystal; very rare occurrence. Obtained from near the surface from the footwall side of the Crystal Reef, Stony Creek, Tarnagulla.
- 458 Gold, associated with Iron Pyrites, Bournonite, and Sulphide of Antimony in Quartz. From the New North Clunes Company's Mine, Clunes.
- 459 Gold in Quartz. From the Rose of Denmark Reef, Rushworth.
- 460 Gold, associated with Iron Pyrites in hackly Quartz. From the Prince of Wales Reef, Amherst.
- 461 Gold, impregnated in a narrow ferruginous quartz-vein, traversing clay slate. Rushworth.
- 462 Gold on a "slickenside" of Sandstone. From the Balaclava Hill Reef, Whroo.

- 463 Maldonite (Bismuth-Gold). Fine specks impregnated in quartz. From the 540 feet level of the Eaglehawk Union Mine, Maldon.
- 464 Osmium-Iridium. Imperfectly crystallized grains. Washed from the gold-drift of Turton's Creek, Gippsland.
- 465 Embolite (Chloro-bromide of Silver) in auriferous Quartz. From the Silver Reef, St. Arnaud (two specimens).
- 466 Embolite (Chloro-bromide of Silver) and Cerussite (Carbonate of Lead) in Quartz. From the Silver Reef, St. Arnaud.
- 467 Native Bismuth. Small specks in quartz. Sandy Creek, Maldon.
- 468 Bismuthite (Carbonate of Bismuth). Roundish irregular grains washed from gold-drift at Beechworth.
- 469 Cassiterite (Tin-Ore). In fine grains, associated with Iron Pyrites, Arsenical Pyrites, Mica, &c., on fine-grained binary granite. From a thin vein (tin floor) in Hensley's so-called tin lode, Beechworth.
- 470 Cassiterite (Stream Tin). Coarse sample. Koetong.
- 471 Cassiterite (Stream Tin). Fine sample. Koetong.
- 472 Granitic Detritus, from which the tin ore samples Nos. 470 and 471 were washed. Koetong.
- 473 Cassiterite (Stream Tin). Mixed with Zircons, Titaniferous Iron and Gold. Washed from the drift of the Black Dog Lead, Chiltern.
- 474 Cassiterite (Stream Tin). Washed from the drift of the Latrobe River, Gippsland.
- 475 Copper Pyrites and Iron Pyrites. Finely but richly impregnated in a diorite gangue. From 190 feet in depth in the Thomson River Copper Company's Mine, near Walhalla, Gippsland.
- 476 Copper Pyrites and Iron Pyrites. Intimately mixed and massive. From 270 feet below the outcrop of the lode, Thomson River Copper Mine, near Walhalla, Gippsland.
- 477 Copper and Iron Pyrites. Intimately mixed. From an ore-shoot in a diorite-dyke, traversing upper silurian rocks. From 120 feet in depth, Thomson River Copper Mine, near Walhalla, Gippsland.
- 478 Copper Ore (Cuprite, Copperglance, Copper Pyrites, Blue and Green Carbonate). From the Thomson River Copper Mine, near Walhalla, Gippsland.
- 479 Malachite and Azurite (Green and Blue Carbonate of Copper) in Brown Iron Ore. From the lode of the Thomson River Copper Mine, near Walhalla, Gippsland.
- 480 Copper Pyrites with Malachite and Azurite, also Iron Pyrites, Brown Iron Ore, etc. From the Buchan Mine, Gippsland.
- 481 Cuprite with Azurite and some Malachite. From the outcrop of a copper lode, about seventeen miles from Lake Omeo, Gippsland.
- 482 Galena. From the Buchan Lead and Silver Mining Company's Mine, Gippsland.
- 483 Galena. From the Buchan Lead and Silver Mining Company's Mine, Gippsland.

- 484 Galena. With small crystals of Cerussite (Carbonate of Lead). From the Thirty-five-mile Creek, head of the Crooked River, Gippsland.
- 485 Galena, associated with Iron Pyrites and Quartz. Pebbles found in the older gold-drift of the North Park Company's Mine, Ballarat.
- 486 Sphalerite (Zinc Blende), associated with Galena and Iron Pyrites in Quartz. From Wilson's Reef, an auriferous quartz-lode, St. Arnaud.
- 487 Sphalerite (Zinc Blende), associated with Iron Pyrites in Quartz. From the 700 feet level, Victoria Reef Mine, Sandhurst.
- 488 Sphalerite (Zinc Blende), associated with Iron Pyrites, Copper Pyrites, and Quartz. From the 430 feet level of the Darling claim, on the Victoria Reef, Maldon.
- 489 Stibnite (Sulphide of Antimony). From an auriferous quartz lode in the Alison Mine, Costerfield.
- 490 Stibnite (Sulphide of Antimony), associated with Quartz, and enclosing small specks of Gold. Heathcote.
- 491 Stibnite (Sulphide of Antimony). From the Stockyard Reef, Whroo.
- 492 Stibnite (Sulphide of Antimony). From a quartz-lode at Blackwood.
- 493 Stibnite (Sulphide of Antimony). From Mount Pleasant.
- 494 Stibnite (Sulphide of Antimony), partly converted into Cervantite. From a lode (two feet wide), at a depth of twenty-five feet, Dunolly.
- 495 Cervantite (Oxide of Antimony). From a lode (two feet wide) at a depth of twenty-five feet, Dunolly.
- 496 Cervantite (Oxide of Antimony). With patches of Stibnite (Sulphide of Antimony), the oxide being densely impregnated with crystals of Quartz. From Stockyard Reef, Whroo.
- 497 Cervantite. With Valentinite, Stibnite, and Gold in Quartz. From the Balaclava Hill Reef, Whroo.
- 498 Cervantite (Oxide of Antimony). Mixed with Hydrous Oxide of Iron and Quartz; resembles impure brown iron ore. Ringwood.
- 499 Senarmontite and Valentinite. The result of roasting antimonial auriferous quartz. Costerfield.
- 500 Molybdenite (Sulphide of Molybdenum). From a vein in granite. Yackandandah.
- 501 Molybdenite. On quartz. From the neighbourhood of Maldon.
- 502 Molybdenite. On metamorphic sandstone. From the neighbourhood of Maldon.
- 503 Molybdenite. On metamorphic sandstone. From Yea.
- 504 Iron Pyrites. On slate. From Cattle's Reef, in the Australian United G.M. Company's Mine, Fryerstown.
- 505 Iron Pyrites. From Ferron's Reef, near Fryerstown.
- 506 Iron Pyrites, partly converted into Brown Iron Ore. From Ferron's Reef, near Fryerstown.
- 507 Iron Pyrites. Cubical crystals on slate. Obtained at a depth of 90 feet from the surface, from Mill, Hilton and Co.'s claim, Commissioner's Flat, Fryerstown.

- 508 Iron Pyrites. Obtained from a reef at Golden Gully, Fryers Creek goldfield.
- 509 Iron Pyrites. Auriferous. From the North Cross Reef Gold-mining Company's Mine, Stawell.
- 510 Iron Pyrites. Of secondary formation; found at the 600 feet level, in cavities in the back of the Albion Reef, Stawell.
- 511 Iron Pyrites. From the Buchan Lead and Silver Mining Company's Mine, Gippsland.
- 512 Iron Pyrites and Copper Pyrites, associated with Calcite. From Thunder and Lightning Creek, Omeo, Gippsland.
- 513 Iron Pyrites. On limestone. Buckland.
- 514 Iron Pyrites, associated with Galena and Quartz. From the 750 feet level, New Chum Reef, Sandhurst.
- 515 Iron Pyrites. Imperfectly crystallised. From Wilson's Reef, St. Arnaud.
- 516 Iron Pyrites, associated with Arsenical Pyrites and Gold in Quartz. From the 200 feet level, on the Cornish Reef, Daylesford.
- 517 Iron Pyrites. Nodular concretions of secondary formation. From a depth of 150 feet in the old auriferous drift-lead of Wombat Hill, Daylesford.
- 518 Wood converted into Iron Pyrites. From the old gold-drift of Daylesford.
- 519 Arsenical Pyrites, mixed with Quartz. From a reef at Bryce's Flat.
- 520 Arsenious Acid, Realgar and Orpimentum. The result of the roasting of auriferous quartz, containing arsenical pyrites. The vein stuff was obtained from a depth of 310 feet from the surface, from the reef of the Old Hampshire Company, Pleasant Creek.
- 521 Micaceous Iron-Ore. From Mount Nower Nower, Gippsland.
- 522 Micaceous Iron-Ore. Mount Woorntuck.
- 523 Iron Glance, with Quartz, etc. From Mount Woorntuck.
- 524 Micaceous Iron-Ore. Finely impregnating quartz, and traversing it in small veins. From Bairnsdale, Gippsland.
- 525 Iron Glance in Basalt (Anamesite). Malmsbury.
- 526 Brown Hematite (Brown Iron-Ore). From the Lal Lal Iron Company's Mine, near Ballarat.
- 527 Brown Hematite (Brown Iron-Ore). From Holcombe, near Glenlyon.
- 528 Brown Hematite (Brown Iron-Ore). Slightly cuprififerous. From the Bald Hills, Gippsland.
- 529 Brown Hematite (Brown Iron-Ore). From the Royal Park, near Melbourne.
- 530 Brown Hematite (Brown Iron-Ore). Rather impure. Appears to be mainly derived from the decomposition of older basalt. North Melbourne.
- 531 Brown Hematite (Brown Iron-Ore). Plates and granules, with iridescent tarnish. Washed from surface drift, Cape Otway Ranges.

- 532 Pisolithic Iron-Ore. From Western Port.
- 533 Pisolithic Iron-Ore. Collected from the surface of a basalt flow, Linton.
- 534 Pisolithic Iron-Ore. From the surface of basalt plain, north-west of Maldon.
- 535 Fossil Wood. Converted into silicious Brown Iron-Ore. From the Yarra Yarra Hydraulic Gold Mining Company's claim, Warburton. (3 specimens.)
- 536 Wad (Ferro-Manganese-Ore). Mammilated coatings and seams in quartz. From an auriferous reef at Sandhurst.
- 537 Wad (Asbolite, Cobaltiferous, and Ferruginous Manganese-Ore). From cavities in the Little Dorrit Reef, Grant.
- 538 Titaniferous Iron and Zircon. Both more or less crystallised. Washed from the gold-drift of Blanket Flat, Daylesford.
- 539 Titaniferous Iron, &c. Washed from alluvial drift, Berwick.
- 540 Titaniferous Iron. Washed from alluvial drift, Dandenong Ranges.
- 541 Titaniferous Iron. Washed from the gold-drift of the Coliban River, near Taradale.
- 542 Titaniferous Iron, mixed with Zircon. Washed from the drift of the Coliban River, below Horseshoe Bend.
- 543 Titaniferous Iron. Washed from the older gold-drift, Blue Mountain Goldfield.
- 544 Titaniferous Iron. Washed from basalt detritus, near Malmsbury.
- 545 Titaniferous Iron, with specks of Gold. Washed from the drift of Reeves' River Lakes.
- 546 Titaniferous Iron. Washed from the drift of a creek near Joanna River, Cape Otway.
- 547 Titaniferous Iron, with grains of Zircon and specks of Gold. Washed from the drift of the Tarwin River, Gippsland.
- 548 Titaniferous Iron. Washed from the drift of a creek at Yea.
- 549 Chromite (Chromic Iron). Washed from alluvial gold-drift, Heathcote.
- 550 Wolfram. In prismatic crystals, impregnating quartz. From Linton.
- 551 Rock-Crystal. From the 700 feet level, New Chum Reef, Sandhurst.
- 552 Quartz, showing prismatic faces, (part of a large crystal). From New Chum Reef, Sandhurst.
- 553 Quartz-Crystals. Some of abnormal development. From Blacksmith's Gully Reef, Fryers Creek.
- 554 Quartz. From the Blacksmith's Gully Reef, Fryers Creek.
- 555 Quartz. From a reef at Golden Gully, Fryers Creek goldfield.
- 556 Quartz, penetrated by acicular crystals of Tourmaline. From Dunolly.
- 557 Quartz. The crystals show an opaque white centre, surrounded by a transparent envelope. From the north-east corner of the parish of Langley, near Mount Macedon.
- 558 Rock Crystal, associated in hollows with Spathic Iron. From the 200 feet level in the Great Britain Gold-mining Company's mine, Prince Alfred Reef, Sandhurst.

- 559 Quartz. From a geode in the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 560 Quartz. From the 200 feet level in the Victory Company's Mine, Sandhurst.
- 561 Quartz (Impure Rock Crystal). From the older gold-drift of the Winter's Freehold Company's Mine, Ballarat.
- 562 Quartz, with Brown Iron-Ore. From Chewton.
- 563 Amethyst. Crystals washed from clay veins in decomposed granite below gold-drift in the neighbourhood of Beechworth.
- 564 Quartz (Prase?). Coloured green by hydrous chromic oxide. From the neighbourhood of Heathcote.
- 565 Quartz (Prase?). Same as No. 564. Heathcote.
- 566 Chalcedonic Quartz. From the older basalt of Phillip Island, Bass's Straits.
- 567 Chalcedony. From the older basalt of Phillip Island, Bass's Straits.
- 568 Chalcedony. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 569 Chalcedony. In crusts enclosing limestone between. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 570 Chalcedony-Geode. Morocco Valley, Gippsland.
- 571 Carnelian, Agate, Chalcedony, Quartz, &c., Pebbles. Washed from auriferous drift near Berwick.
- 572 Clay in which the celebrated "Chalcedony Water-stones, or Enhydros" occur. Some imperfect water-stones are enclosed. From veins in decomposed granite beneath gold-drift, Beechworth.
- 573 Lydian-Stone. From the gold-drift of Chiltern.
- 574 Flint. From near Ferntree Gully, Dandenong Ranges.
- 575 Silicified Wood. Barwon River, near Geelong.
- 576 Silicified Wood. From the Barrabool Hills, near Geelong.
- 577 Silicified Wood. Omeo, Gippsland.
- 578 Common Opal. From near Bairnsdale, Gippsland.
- 579 Hyalite. In parts with the play of colour of "Precious Opal;" coating decomposed basalt (dolerite lava). From Kyneton.
- 580 Semi-Opal. Liver Opal. From the basalt of Ballarat.
- 581 Infusorial Earth. From a deposit, 4ft. in thickness, near Talbot.
- 582 Blue Sapphire, Ruby, and Black Corundum. Washed from the gold-drift of the Blue Mountain goldfield.
- 583 Orthoclase. Twins of the Baveno type embedded in quartz. Bradford, Tarrengower district.
- 584 Orthoclase. From the granite, Staughton's run, neighbourhood of the Anakie Hills, Geelong district.
- 585 Albite in Quartz. Affected by decomposition. From the Blacksmith's Gully Reef, Fryers Creek.
- 586 Oligoclase. From the basalt of the centre one of the three Anakie Hills (points of eruption) near Geelong.
- 587 Fibrolite. Pebble found in gold-drift at Beechworth.
- 588 Pitchstone. From the Linscott's Company's Mine, Maldon.

- 589 Garnet. Massive, associated with Hornblende, Dolomite and Quartz. From the 450ft. level of the North Eaglehawk United Company's Gold Mine, Maldon.
- 590 Garnet. Associated with Hornblende and Quartz. From the Eaglehawk Union Company's Mine, Maldon.
- 591 Hornblende. Associated with Garnet and Quartz (variety of Eklogite?). From a depth of 550 feet in the Eaglehawk Union Company's Mine, Maldon.
- 592 Zircon. In crystals and grains, associated with Titaniferous Iron, richly dispersed through sand, washed from the bed of the Lerderderg Creek, Blackwood.
- 593 Black Tourmaline (Schorl). In porphyritic granite, Beechworth.
- 594 Black Tourmaline (Schorl). Part of a large crystal, found in gold-drift at Beechworth.
- 595 Tourmaline. Dark brown acicular crystals in quartz. From Linton.
- 596 Olivine and Olivine Sand. From the basalt of the centre one of the three Anakie Hills (points of eruption), near Geelong.
- 597 Analcime. Druse of trapezohedral crystals. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 598 Natrolite. Druse of acicular crystals, associated with Analcime. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 599 Natrolite. Druse of acicular crystals. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 600 Phacolite.* In large crystals. From the quarries in the newer basalt of Richmond, near Melbourne.
- 601 Phacolite.* Same as foregoing. Richmond.
- 602 Phacolite.* Incrustation of fine crystals (a rare form) in a cavity of basalt. From the Richmond quarries, near Melbourne.
- 603 Phacolite,* associated with Calcite, the latter of a deep brown colour, and forming peculiar club-shaped aggregations of acute rhombohedrons. Basalt quarries, Richmond, near Melbourne.
- 604 Phillipsite, associated with Phacolite and Sphærosiderite. From the basalt quarries of Richmond, near Melbourne.
- 605 Selwynite, traversed by fine seams of Talcosite. Mount Ida, Heathcote.
- 606 Talcosite. In fine seams, traversing Selwynite. Mount Ida, Heathcote.
- 607 Allophane upon Quartz. From a reef at Stawell.
- 608 Allophane upon Quartz. From the Hampshire Reef, Pleasant Creek.
- 609 Nontronite (Green Earth). From decomposed older basalt, Western Port.
- 610 Kaolin. Found in sinking a well on allotment 4, section 7, parish of Baringhup, near Maldon.
- 611 Kaolin. Bulla Bulla, near Melbourne.

*This Zeolite was formerly taken to be, and described as Herschelite, but the recent crystallographic and optic examinations by Professor Gerard Vom Rath, of Bonn, have proved it to be Phacolite.

- 612 Arsenic-iron-sinter and Pharmacosiderite in auriferous Quartz. From the Silver Reef, St. Arnaud.
- 613 Pharmacosiderite, associated with manganiferous Brown Iron-ore and encrusting Quartz. From a depth of 444 feet, from Robinson's Reef, Port Phillip Company's Mine, Clunes.
- 614 Vivianite, associated with Dolomite upon Quartz. From a depth of 550 feet in the Eaglehawk Union Company's Mine, Maldon.
- 615 Vivianite (Earthy Phosphate of Iron—Blue Iron Earth). From clay at Western Port Bay.
- 616 Struvite. From the guano (formed mainly of the excrements of bats) found in the Skipton Caves, near Ballarat.
- 617 Guano. The matrix of the crystals of Struvite (No. 616). From the Skipton Caves, near Ballarat.
- 618 Apatite and Scheelite. On crystals impregnating Quartz. From a depth of 550 feet in the Eaglehawk Union Company's Mine, Maldon.
- 619 Apatite and Scheelite. Same as foregoing. Maldon.
- 620 Scheelite. Octahedral crystals embedded in Quartz. From the Eaglehawk Union Company's Mine, Maldon.
- 621 Scheelite. Same as foregoing. Maldon.
- 622 Scheelite. Imperfect crystals and crystalline grains out of Quartz. From the Eaglehawk Union Company's Mine, Maldon.
- 623 Scheelite. An aggregation of grains and imperfect crystals. From the Eaglehawk Union Company's Mine, Maldon.
- 624 Barite (Heavy Spar). From a lode in limestone at Buchan station, Murindall River, Gippsland.
- 625 Selenite (Gypsum). Out of tertiary clay. Western Port.
- 626 Selenite (Gypsum). From tertiary clay, Point Addis, near Geelong.
- 627 Calcite with Analcime. The former in saddle-shaped, obtuse rhombohedrons. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 628 Calcite with Analcime. The former crystallised in a rather rare form of rhombohedron. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 629 Calcite. In acute rhombohedrons. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 630 Calcite. In twinned obtuse rhombohedrons. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 631 Calcite. Cleavage rhombohedron, with Analcime in a cavity. From the older amygdaloidal basalt of Phillip Island, Bass's Straits.
- 632 Calcite. Crystallised in scalenohedrons, some terminated by a rhombohedron. From the Buchan Lead Mine, Gippsland.
- 633 Calcite. Massive, with some brown Hematite. From the Buchan Lead Mine, Gippsland.
- 634 Lode-stone. Composed of Calcite, Iron Pyrites, &c. From the galena lode of the Buchan Company's Mine, Gippsland.

- 635 Calcite. Light yellow, roundish knobs, consisting of aggregations of acute rhombohedrons. coating cavities in basalt. From the newer basalt of Richmond, near Melbourne.
- 636 Calcite. Same as foregoing, but of a darker colour. Richmond.
- 637 Calcite. Drusy coating of rhombohedral crystals upon quartz. From the richly auriferous main lode (Cohen's Reef, 5 feet wide), 170 feet below water level. New North Gippsland Company's Mine, Walhalla, North Gippsland.
- 638 Calcite. In mammillated crusts and veins. From a basalt dyke, at 650 feet in depth, in the Windmill Hill Gold Mining Company's Reef, Sandhurst.
- 639 Calcite. Crystallized in obtuse rhombohedrons. From the 550 feet level, on Windmill Hill Reef, Sandhurst.
- 640 Calcite. Crystallized in obtuse rhombohedrons. From the 900 feet level, on Hustler's Reef, Sandhurst.
- 641 Calcite. In obtuse rhombohedrons, associated with Iron Pyrites. From the basalt dyke accompanying the Garden Gully Reef, at the 600 feet level, in the Victory Gold Mining Company's Mine, Sandhurst.
- 642 Calcite. From Campbell's Reef, an auriferous quartz lode, at Moyston, near Ararat.
- 643 Calcite Stalactite. From the limestone caverns, Buchan River, Gippsland.
- 644 Aragonite. Druse cavity of acicular crystals in basalt. Richmond Quarries, near Melbourne.
- 645 Aragonite. Acicular crystals on basalt. From the neighbourhood of Malmsbury.
- 646 Aragonite. Acicular crystals from a cavity in basalt. Found in sinking the main shaft of the Woody Yallok Extended Gold Mining Company, Pitfield, near Smythesdale.
- 647 Aragonite. From the older basalt of Phillip Island, Bass' Straits.
- 648 Magnesite (Carbonate of Magnesia). In nodular concretions. Whipstick, Sandhurst.
- 649 Magnesite. In nodular concretions. From the neighbourhood of Heathcote.
- 650 Magnesite. Similar to the foregoing. From Jim Crow Creek, near Newstead.
- 651 Bitter Spar and Quartz. Forming a coating on fine-grained, felspathic, much decomposed diorite. From a dyke traversed by auriferous quartz veins, Durham Gully, Alexandra.
- 652 Brown Spar with Galena. From the Buchan Lead Mine, Gippsland.
- 653 Siderite (Carbonate of Iron). On charred wood. From underneath basalt, Ballarat.
- 654 Carbonate of Iron. Resembling "Black Band." From the older gold-drift of a deep lead, Ballarat.
- 655 Brown Spar with Iron Pyrites. Drusy coatings in irregular cavities of Quartz. From the 230 feet level in the Central Eaglehawk Company's Mine, Maldon.

- 656 Brown Spar, associated with Heulandite. In crevices and hollows of metamorphic sandstone, forming at a depth of 550 feet the walls of the Great Western Company's Reef, Maldon.
- 657 Ferro-Calcite (Carbonate of Lime and Iron). Mammillated crusts and concretions from cavities in the basalt of Kyneton.
- 658 Ferro-Calcite (Carbonate of Lime and Iron). Reniform concretions from the basalt. Parish of Baynton.
- 659 Ferro-Calcite. From the basalt near Sunbury.
- 660 Ferro-Calcite. Mammillated crusts in cavities of basalt. From Sunbury.
- 661 Coal. From Cape Patterson.
- 662 Lignite (Brown Coal). From the auriferous drift-lead in the Lord Malmsbury Company's claim, 175 feet beneath the surface, Malmsbury.
- 663 Lignite (Brown Coal). Woody structure pretty well preserved. From auriferous drift at a depth of 180 feet, Daly Lead, Inglewood.
- 664 Lignite. Woody structure quite preserved. Obtained from 175 feet beneath the surface, at Coomora, near Daylesford.
- 665 Lignite (Brown Coal). From the older auriferous gold-drift. Ballarat.
- 666 Lignite (Brown Coal). From a deposit above 120 feet in thickness at Lal Lal, near Ballarat.

ECONOMIC COLLECTION.

AURIFEROUS QUARTZ.

(M.O., Mine Owner; E., Exhibitor.)

- 667 (1) Amorphous translucent Quartz, 4 inches by 3 inches by 2 inches; laminated by galena, with a little iron pyrites and gold. Proportion of pyrites—scarcely any. From the Queen's Birthday Reef, Dunolly. Depth from the surface at which the specimen was obtained, 400 feet; width of the reef, 5 feet; average yield of gold per ton, not tested.—E., W. G. Couchman, mining surveyor, Dunolly.
- 668 (2) Crystalline, brownish-white Quartz, 4 inches by 3 inches by 2 inches; cavities partly filled by greenish-blue clay slate, iron pyrites, and much fine gold; the pyrites is for the most part contained in the clay slate; the numerous cubical and other shaped cavities left by the decomposition of pyrites shows that the slate did contain more of it than is now visible; the gold occurs on the walls of the cavities. Proportion of pyrites, scarcely any. From the Sandstone Reef, Llanelly. Depth from the surface at which the specimen was obtained, 340 feet; width of the reef, 21 feet; depth of the water-line, 108 feet; average yield of gold per ton, 13 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.
- 669 (3) Piece of bluish translucent amorphous Quartz, 4 inches by 3 inches by 2 inches; laminated by blue clay slate, the lamina contains numerous cavities; one face of the specimen, which

is parallel to the lamina, is highly polished (slickensides), and in it is embedded fine gold, galena, and pyrites. Proportion of pyrites, scarcely any. From the Avon Reef, Dunolly. Depth from the surface at which the specimen was obtained, 220 feet; width of the reef, 1 foot 6 inches; average yield of gold per ton, 1 oz. 3 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.

- 670 (4) Amorphous hard white quartz (two specimens); the lines of fracture are stained a brown colour by peroxide of iron; cavities, few; a little fine gold occurs near a cavity in the smallest specimen. Proportion of pyrites, absent. From the Monday Morning Reef, Dunolly. Depth from the surface at which the specimen was obtained, 60 feet; width of the reef, 3 feet 6 inches; average yield of gold per ton, 2 ozs. 10 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.
- 671 (5) Amorphous, dense, brownish-white Quartz, 5 inches by 3 inches; a large cavity contains much pyrites and little galena; one side of the cavity consists of what miners term "mice-eaten quartz;" two small cavities are nearly filled with galena, and an empty one has a little gold on its sides; the natural fractures of the stone are coloured by peroxide of iron; on one face there is a thin coating of black oxide of manganese and a little greenish clay slate. Proportion of pyrites very small. From the Windmill Reef, Dunolly; depth from the surface at which the specimen was obtained 80 feet; width of the reef, 2 feet 6 inches; average yield of gold per ton, 2 oz.—E., W. G. Couchman, mining surveyor, Dunolly.
- 672 (6) Compact white Quartz, 5 inches by 3 inches by 1 inch; cavities numerous, partly filled with clay, mica, and gold; one face stained by peroxide of iron. Proportion of pyrites, absent. From the Quaker's Reef, Dunolly; depth from the surface at which the specimen was obtained, 125 feet; width of the reef, 2 feet; average yield of gold per ton, 3 ozs.—E., W. G. Couchman, mining surveyor, Dunolly.
- 673 (7) Block of dense bluish-white amorphous Quartz, 6 inches by 3 inches; fine gold occurs in the cavities, associated with iron pyrites; several of the cavities are lined with iron pyrites; the natural fractures of the specimen are coated and stained by peroxide of iron. Proportion of pyrites, scarcely any. From the Specimen Reef, Tarnagulla; depth from the surface at which the specimen was obtained, 235 feet; depth of the water-line, 200 feet; width of the reef, 2 feet 6 inches; average yield of gold per ton, 19 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.
- 674 (8) Piece of amorphous white Quartz, 3 inches by 2 inches by 2 inches; fracture of the quartz even. Lustre dull; cavities in the iron pyrites. Proportion of pyrites very large. From Wayman's Reef, Moliagul. Depth from the surface at which the specimen was obtained, 220 feet; width of the reef 6 feet.—E., W. G. Couchman, mining surveyor, Dunolly.

- 675 (9) Hard bluish-white translucent Quartz, 6 inches by 2 inches by 1 inch; laminated by green-coloured clay slate; the faces of the laminæ contain iron pyrites; the cavities and seams in the quartz are filled with clay slate and gold. Proportion of pyrites, scarcely any. From Avon Reef, Dunolly. Depth from the surface at which the specimen was obtained, 200 feet; width of the reef, 1 foot 6 inches; average yield of gold per ton, 10 ozs. 3 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.
- 676 (10) Dense bluish-white amorphous Quartz, 4 inches by 3 inches by 2 inches; one face and the cavities of the specimen are covered by green and purple-coloured clay slate; fine gold occurs in the quartz near the "slate casing" or wall of the reef and in the solid quartz. Proportion of pyrites, absent. From Havelock Reef, Dunolly. Depth from the surface at which the specimen was obtained, 50 feet; width of reef, 2 feet; average yield of gold per ton, 8 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.
- 677 (11) Amorphous brown pink Quartz, 3 inches by 3 inches by 3 inches; laminated very regularly; the walls of the laminæ are full of cavities, which are partly filled with fine gold, mica, and clay; the fracture across the laminæ is even. Proportion of pyrites, absent. From the Sydenham Reef, Dunolly. Depth from the surface at which the specimen was obtained, 150 feet; width of the reef, 5 feet; average yield of gold per ton, 1 oz. 5 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.
- 678 (12) Bluish-white translucent Quartz, 3 inches by 1 inch by 1 inch; regularly laminated; much fine gold occurs in the laminæ, with clay slate; fracture of the quartz uneven. Proportion of pyrites, absent. From the Hellas Reef, Llanelly. Depth from the surface at which the specimen was obtained, 120 feet; width of the reef, 18 inches; average yield of gold per ton, 8 ozs.—E., W. G. Couchman, mining surveyor, Dunolly.
- 679 (13) Block of bluish-white translucent compact Quartz, 6 inches by 6 inches by 4 inches. The quartz is laminated regularly, and on the walls of the laminæ are gold, clay-slate, iron pyrites, and zinc blende; one face of the block is covered by a deposit of peroxide of iron. Proportion of pyrites, scarcely any. From the New Chum Reef, Llanelly. Depth from the surface at which the specimen was obtained, 180 feet; width of the reef, 5 feet; average yield of gold per ton, 2 ozs.—E., W. G. Couchman, mining surveyor, Dunolly.
- 680 (14) Block of white Quartz, 12 inches by 8 inches by 4 inches; fine "flour" gold is sprinkled over one of the natural faces of the block; this face is partly covered with clay; the specimen is broken with the natural divisions of the stone, which are all coloured by oxide of iron; fracture of the quartz uneven. Proportion of pyrites, absent. From the Exhibition

Reef, Dunolly. Depth from the surface at which the specimen was obtained, 20 feet; width of the reef 25 feet; average yield of gold per ton, 5 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.

- 681 (15) Bluish-white translucent Quartz, 11 inches by 8 inches by 4 inches. Iron pyrites occurs in isolated patches in the quartz; the cavities in the specimen are partly filled by black clay slate, iron pyrites and gold; at one corner of the block gold is visible in thin veins on iron pyrites and in black clay slate; one face is partly covered by a polished black carbonaceous clay slate, in which are embedded crystals of pyrites. Proportion of pyrites, scarcely any. From the Corfu Reef, Tarnagulla. Depth from the surface at which the specimen was obtained, 230 feet; depth of the water-line, 120 feet; width of the reef, 5 feet; average yield of gold per ton, 1 oz. 10 dwts.—E., W. G. Couchman, mining surveyor, Dunolly.
- 682 (16) Compact hard white Quartz, 12 inches by 7 inches by 6 inches; one face is covered by a greenish-blue clay slate; veins and patches of this slate are in the quartz, and mixed with it are found zinc blende, iron pyrites, gold and prase; cavities small and empty. Proportion of pyrites, scarcely any. From the Sultan Company's Mine, Blackwood. Depth from the surface at which the specimen was obtained, 500 feet.—E., E. M. Cairnes, warden's clerk, Blackwood.
- 683 (17) Block containing quartz veins in sandstone and clay slate, 15 inches by 12 inches by 3 inches; fine gold is in the quartz, the slate, and the sandstone; iron pyrites occurs in the slate and quartz. Proportion of pyrites, scarcely any. From the Sultan Company's Mine, Blackwood. Depth from the surface at which the specimen was obtained, 450 feet.—E., E. M. Cairnes, warden's clerk, Blackwood.
- 684 (18) Brown-pink and bluish-white Quartz, 8 inches by 3 inches by 2 inches; all the faces but one are covered or stained by peroxide of iron and a little clay slate; the freshly fractured face contains numerous small cavities more or less filled with zinc blende, iron pyrites, galena, and gold, and one corner of it is covered with clay slate and mica. Proportion of pyrites, scarcely any. From the Sultan Company's Mine, Blackwood. Depth from the surface at which the specimen was obtained, 165 feet.—E., E. M. Cairnes, warden's clerk, Blackwood.
- (19) Compact hard translucent bluish-white Quartz (three specimens); cavities in the quartz numerous and more or less filled with zinc blende, iron pyrites, and gold, which are sometimes associated; the specimens are laminated parallel to the walls of the reef; the faces, which are covered with slate, are next the casing or walls of the reef; each specimen represents a section of the thickness of the vein. Proportion of pyrites, scarcely any. From the Sultan Company's Mine, Blackwood. Width of the reef, $2\frac{1}{2}$ inches.—E., E. M. Cairnes, warden's clerk, Blackwood.

- 686 (20) Dense brown-pink and white Quartz, 3 inches by 3 inches by 3 inches; the specimen is laminated and slightly granular on each side of the bluish band in the centre; fracture splintery and uneven; extremely fine gold occurs in the centre band. Proportion of pyrites, scarcely any. From the North Britain Company's Mine, Blackwood. Depth from the surface at which the specimen was obtained, 20 feet; width of reef, 9 feet; average yield of gold per ton, 13 ozs.—E., E. M. Cairnes, warden's clerk, Blackwood.
- 687 (21) Dense bluish-white translucent Quartz (17 specimens); laminated by blue clay slate; iron pyrites, galena, gold, and zinc blende occur in the laminæ and scattered in isolated patches in the solid quartz; gold is in the slate, and is associated with the iron pyrites, galena, and zinc blende in the laminæ and in the patches; iron pyrites is spread over parts of the specimen in thin parti-coloured shales; cavities, numerous and empty; prase in patches is in the quartz of some of the specimens. Proportion of pyrites, scarcely any. From the north section, intermediate lode, Sultan Company's Mine, Blackwood. Depth from surface at which the specimens were obtained, 400 feet.—E., J. F. Hansen, mining registrar, Blackwood.
- 688 (22) Dense amorphous bluish-white Quartz (7 specimens); laminated with blue clay slate, in which iron pyrites, galena, gold, and zinc blende occur; the laminæ are well defined, and parallel to the casing or walls of the reef; the specimens contain patches and strings of prase; cavities, empty and not numerous; the slate on one face of the largest specimen is striated; most of the gold is in the laminæ. Proportion of pyrites, scarcely any. From the south section, intermediate lode, Sultan Company's Mine, Blackwood. Depth from the surface at which the specimen was obtained, 400 feet.—E., J. F. Hansen, mining registrar, Blackwood.
- 689 (23) Brown-pink hard translucent Quartz, 6 inches by 5 inches by 4 inches; cavities very numerous and empty; the greater number of them are cubical, their form is due to iron pyrites, which is still visible in some of the cavities; gold is visible attached to the edges of some of the cavities; fracture of the quartz uneven. Proportion of pyrites, scarcely any. From the Old Man Reef, Clunes. Depth from surface at which the specimen was obtained, 150 feet; width of the reef, 5 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 690 (24) Amorphous compact bluish-white and brown-pink Quartz, 5 inches by 4 inches by 4 inches; one end of the specimen is stained by peroxide of iron; veins of iron pyrites, with a little clay slate and mica, laminate the specimen. Proportion of pyrites, scarcely any. From the Eastern Reef, Clunes. Depth from the surface at which the specimen was obtained, 300 feet; width of reef, 3 feet. M.O., Port Phillip and Colonial Gold Mining Company; E., R. H. Bland, Clunes.

- 691 (25) Compact bluish-white quartz, surrounded by brown-pink Quartz, 5 inches by 4 inches by 3 inches; laminated by iron pyrites, and a little clay slate with mica. Proportion of pyrites, scarcely any. From the Eastern Reef, Clunes. Depth from the surface at which the specimen was obtained, 300 feet; width of reef, 3 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 692 (26) Amorphous brownish-white Quartz, 3 inches by 3 inches by 2 inches; massive iron pyrites occupies one side of the specimen, and small patches occur in the solid quartz; a little galena is associated with the iron pyrites; a portion of the casing or wall of the reef is attached to one side of the quartz. Proportion of pyrites, large. From the Western Reef, Clunes. Depth from the surface at which the specimen was obtained, 690 feet; width of reef, 8 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 693 (27) Translucent white Quartz, 8 inches by 6 inches by 3 inches; cavities small; blue clay slate and iron pyrites laminate the quartz; fracture sub-conchoidal; a little fine gold occurs in the laminæ. Proportion of pyrites, scarcely any. From the Western Reef, Clunes. Depth from the surface at which the specimen was obtained, 690 feet; width of the reef, 8 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 694 (28) Block of dense hard white Quartz, 7 inches by 7 inches by 3 inches; the natural fractures of the quartz are stained by oxide of iron; cavities partly filled by iron pyrites; massive iron pyrites and a little galena occur in patches through the quartz. Proportion of pyrites, small. From the Western Reef, Clunes. Depth from the surface at which the specimen was obtained, 690 feet; width of the reef, 8 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 695 (29) Amorphous hard bluish-white Quartz, 7 inches by 4 inches by 2 inches; laminated by clay slate, in which is a little iron pyrites; the natural fractures of the specimen are stained by oxide of iron. Proportion of pyrites, scarcely any. From the Western Reef, Clunes. Depth from the surface at which the specimen was obtained, 790 feet; width of the reef, 6 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 696 (30) Block of greenish-blue Clay Slate, 6 inches by 5 inches by 4 inches; small quartz veins cut through the slate, destroying the regularity of its structure; arsenical and iron pyrites are thickly distributed through the specimen. Proportion of pyrites, not large. From the Western Reef, Clunes. Depth from the surface at which the specimen was obtained, 790 feet; width of the reef 6 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.

- 697 (31) Translucent white Quartz, 9 inches by 5 inches by 4 inches; irregular thin veins of clay slate, with which is mixed iron pyrites, intersect the quartz; patches of iron pyrites and small detached pieces of zinc blende are scattered in the quartz; the natural fractures of the specimens are coloured by oxide of iron. Proportion of pyrites, scarcely any. From the Western Reef, Clunes. Depth from the surface at which the specimen was obtained, 790 feet; width of the reef, 6 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 698 (32) Amorphous hard white translucent Quartz, 7 inches by 4 inches by 3 inches; the quartz is discoloured by oxide of iron; iron pyrites, galena, and gold, sometimes in association, are sprinkled through the quartz; a little gold is visible in the face of the specimen, which is partly covered by clay slate; fracture of the quartz splintery. Proportion of pyrites, scarcely any. From the Western Reef, Clunes. Depth from the surface at which the specimen was obtained, 790 feet; width of the reef, 6 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 699 (33) Compact greyish-white Quartz, 7 inches by 4 inches by 3 inches, laminated by green clay slate; under the slate the quartz possesses the character of what miners call “mice eaten” quartz; in the sides of the cavities of this peculiarly marked quartz occurs gold, galena, zinc blende, and iron pyrites; one face of the specimen has a polished “slickenside” appearance. Proportion of pyrites, scarcely any. From the New Eastern Reef, Clunes. Depth from the surface at which the specimen was obtained, 890 feet; the reef when first struck was 2 feet 6 inches in width, but has widened to 24 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 700 (34) Amorphous bluish-white Quartz, 5 inches by 4 inches by 2 inches; two faces of the quartz are indented not unlike “mice eaten” quartz, and in the shallow cavities are found gold, zinc blende, and galena; fracture sub-conchoidal. Proportion of pyrites, scarcely any. From the New Eastern Reef, Clunes. Depth from the surface at which the specimen was obtained, 969 feet; width of the reef from 2 feet 6 inches to 24 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 701 (35) White translucent hard Quartz, 4 inches by 3 inches by 2 inches; one face of the quartz is partly covered by iron pyrites and clay slate; cavities more or less filled with clay slate and pyrites; fracture of the quartz uneven. Proportion of pyrites, scarcely any. From the New Eastern Reef, Clunes. Depth from the surface at which the specimen was obtained, 890 feet; width of the reef from 2 feet 6 inches to 24 feet. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.

- 702 (36) Block of bluish-white Quartz with Slate (two specimens); laminated by greenish-blue clay slate; the sides of the specimens have pieces of slate rock attached to them; prase occurs in spots in the quartz. Proportion of pyrites, absent. From the shaft of the Port Phillip and Colonial Gold Mining Company, Clunes. Depth from the surface at which the specimen was obtained, 969 feet, width of the reef 10 inches. M.O., Port Phillip and Colonial Gold Mining Company.—E., R. H. Bland, Clunes.
- 703 (37) White Quartz with Pyrites, &c., (four specimens); a part of the iron pyrites in the specimen is iridescent; galena is associated with the pyrites; some of the quartz is coloured by oxide of iron. Proportion of pyrites, consisting nearly wholly of pyrites. From the New Chum Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 650 feet; depth of the water-line, 180 feet; width of the reef from 5 to 15 feet; average yield of gold, per ton, over 1 oz. 5 dwts. M.O., Lazarus New Chum Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 704 (38) Bluish-white amorphous Quartz (two specimens); the quartz is laminated by black carbonaceous clay slate and arsenical pyrites; gold occurs mixed with galena and with pyrites. Proportion of pyrites, small. From the New Chum Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 700 feet; depth of the water-line, 180 feet; width of the reef from 5 to 15 feet; average yield of gold per ton, over 1 oz. 5 dwts. M.O., Lazarus New Chum Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 705 (39) Amorphous bluish-white vitreous translucent Quartz, 5 inches by 4 inches by 4 inches; laminated regularly by dark blue clay slate; iron pyrites occurs in the laminæ in patches and shales in the quartz; two ends of the specimen are covered by black carbonaceous clay slate; fine gold is visible in the laminæ and with pyrites in the quartz; fracture of the quartz even. Proportion of pyrites, scarcely any. From the Comet Claim, Taradale. Depth from the surface at which the specimen was obtained 300 feet; depth of the water-line, 60 feet; width of the reef, 2 feet; average yield of gold per ton, 1 oz. M.O., Comet Quartz Claimholders.—E., Thomas Orwin, mining registrar, Taradale.
- 706 (40) Bluish-white compact dull Quartz, 5 inches by 5 inches by 2 inches; irregularly laminated by black carbonaceous clay slate; iron pyrites is visible near the laminæ; a little fine gold occurs in the solid quartz. Proportion of pyrites, scarcely any. From the Comet Claim, Taradale. Depth from the surface at which the specimen was obtained, 300 feet; depth of the water-line, 60 feet; width of the reef, 2 feet; average yield of gold per ton, 1 oz. M.O., Comet Quartz Claimholders.—E., Thos. Orwin, mining registrar, Taradale.

- 707 (41) Piece of a Quartz-vein attached to Slate Rock, 4 inches by $1\frac{1}{2}$ inches by 1 inch; a little iron pyrites occurs in the quartz and in the slate; cleavage of the slate nearly at right angles to the quartz-vein; heavy gold is embedded in the quartz. Proportion of pyrites, very small. From a crosscut driven from the shaft of the Lazarus New Chum Mining Company (Registered), Sandhurst. Depth from the surface at which the specimen was obtained, 800 feet; depth of the water-line, 180 feet. M.O., the Lazarus New Chum Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 708 (42) Amorphous bluish-white Quartz (2 specimens), laminated irregularly by light-coloured blue clay slate; the lines of deposit of the slate are visible in the laminae; gold in fine specks occurs in the laminae; cavities more or less filled with iron pyrites, clay slate, gold, and galena; iron pyrites is in the laminations with the slate; fracture of the quartz, even. Proportion of pyrites, very small. From the Cornish Reef, Daylesford. Depth from the surface at which the specimen was obtained, 200 feet; depth of the water-line, 80 feet; width of the reef, 6 feet; average yield of gold per ton, 10 dwts. M.O., the Cornish Company, Daylesford.—Thomas Hale, mining registrar, Daylesford.
- 709 (43) Dense hard white Quartz, 3 inches by 3 inches by 1 inch; one side of the specimen shows a face of a lamina on which is embedded iron pyrites; cavities small, partly filled by pyrites, some empty; pyrites occurs in the solid quartz, in one place it is associated with gold. Proportion of pyrites, very small. From the Cornish Reef, Daylesford. Depth from the surface at which the specimen was obtained, 360 feet; depth of the water-line, 80 feet; width of the reef, 7 feet; average yield of gold per ton, 9 dwts. M.O., the Cornish Company.—E., Thomas Hale, mining registrar, Daylesford.
- 710 (44) Amorphous dull white translucent Quartz, 4 inches by 2 inches by 1 inch; cavities formed by faces of crystals, few in number and empty; massive iron pyrites occurs in the solid quartz, with a little fine gold; two faces of the specimen are partly covered by clay slate, and show lines of striation. Proportion of pyrites, very small. From the Cornish Reef, Daylesford. Depth from the surface at which the specimen was obtained, 480 feet; depth of the water-line, 80 feet; width of the reef, 10 feet; average yield of gold per ton, 7 dwts. M.O., the Cornish Company.—E., Thomas Hale, mining registrar, Daylesford.
- 711 (45) Blocks of dull bluish-white Quartz (three specimens). Iron pyrites occurs massive in patches in the specimen and in small isolated crystals, sometimes in the cavities and at others in the solid quartz and clay slate; faces of the specimens are covered with clay slate; some of the cavities are formed by the planes of quartz crystals, and the quartz in others shows

the character which miners term "mice eaten." Proportion of pyrites, very small. From the Cornish Reef, Daylesford. Depth from the surface at which the specimen was obtained, 480 feet; depth of the water-line, 8 feet; width of the reef, 10 feet; average yield of gold per ton, 7 dwts. M.O., the Cornish Company.—E., T. Hale, mining registrar, Daylesford.

- 712 (46) Brown-pink Quartz, 4 inches by 3 inches by 2 inches; cavities are numerous and formed by the planes of crystals; the quartz is coloured by oxide of iron, a deposit of which occurs in one face of the specimen; gold is visible on the side of a cavity; some of the quartz has the "mice eaten" character. Proportion of pyrites, absent. From the Freeman's Reef, Daylesford. Depth from the surface at which the specimen was obtained, 200 feet; depth of the water-line, 200 feet; width of the reef, 4 feet; average yield of gold per ton, 8 dwts. M.O., Freemasons' Company.—E., Thomas Hale, mining registrar, Daylesford.
- 713 (47) Bluish-white and brown Quartz, 7 inches by 4 inches by 3 inches; cavities numerous, formed by planes of crystals and more or less filled with clay; the quartz is discoloured by oxide of iron; some of the quartz has the peculiar "mice eaten" character; dark blue clay slate traverses the stone in their disjointed bands; fracture of quartz even. Proportion of pyrites, absent. From St. George's Reef, Daylesford. Depth from the surface at which the specimen was obtained, 300 feet; depth of the water-line, 75 feet; width of the reef, 6 feet; average yield of gold per ton, 5 dwts. M.O., South No. 1 Claimholders.—E., T. Hale, mining registrar, Daylesford.
- 714 (48) White and brownish-white quartz, 8 inches by 5 inches by 4 inches; cavities numerous, some of them formed like straight rifts in the quartz, most of them are empty and others only partly empty; one face has the appearance of having undergone a sliding motion; a little iron pyrites and gold occurs in cavities on one edge of the stone; fracture of the quartz, even; lustre satiny. Proportion of pyrites, scarcely any. From the Mauritius Reef, Daylesford. Depth from the surface at which the specimen was obtained, 100 feet; depth of the water-line, 90 feet; width of the reef, 4 feet; average yield of gold per ton, 10 dwts. M.O., the Freehold Company.—E., Thomas Hale, mining registrar, Daylesford.
- 715 (49) Brownish-white Quartz, 5 inches by 2 inches by 2 inches; cavities numerous, more or less empty; in some of them occur galena, zinc blende, and a little iron pyrites; three sides of the specimen are fractured with the natural divisions of the quartz, and are more or less covered with a deposit of oxide of iron; the quartz is laminated by blue and yellow clay slate. Proportion of pyrites, scarcely any. From Black Jack's Reef, Daylesford. Depth from the surface at which the specimen was obtained, shallow. M.O., the Black Jack Claimholders.—E., Thomas Hale, mining registrar, Daylesford.

- 716 (50) Brownish-white Quartz, 4 inches by 3 inches by 2 inches ; cavities numerous, scattered in the solid quartz and in the laminations of the specimen, partly filled with blue clay, slate, galena, and zinc blende ; fracture, uneven ; lustre, vitreous. Proportion of pyrites, absent. From the Black Jack Reef, Daylesford. Depth from the surface at which the specimen was obtained, shallow. M.O., the Black Jack Claimholders.—E., Thomas Hale, mining registrar, Daylesford.
- 717 (51) Brown-pink translucent Quartz, 8 inches by 5 inches by 4 inches ; cavities more or less filled with clay ; laminated by bluish clay slate ; fracture, uneven ; lustre, dull. Proportion of pyrites, absent. From Miller-street, Daylesford. Broken from a boulder found embedded in clay on the surface.—E., Thomas Hale, mining registrar, Daylesford.
- 718 (52) Yellowish-white quartz, 7 inches by 5 inches by 4 inches ; cavities few, formed by the planes of crystals, and in one spot the walls of the cavities have what miners call a “mice-eaten” appearance ; fracture of quartz, splintery ; lustre, satiny. Proportion of pyrites, absent. From Miller-street, Daylesford. Broken from a boulder found embedded in clay, on the surface.—E., Thomas Hale, mining registrar, Daylesford.
- 719 (53) Grey and yellowish white Quartz (three specimens) ; cavities numerous, partly formed by the planes of crystals ; they occur in a straight rift in one specimen, and in isolated spots in the others ; fracture, uneven. Proportion of pyrites, absent. From Mauritius Reef, Daylesford. Depth from the surface at which the specimen was obtained, shallow ; average yield of gold per ton, from 5 to 10 dwts. M.O., the Mauritius Reef Claimholders.—E., Thomas Hale, mining registrar, Daylesford.
- 720 (54) Milk-white translucent Quartz, 4 inches by 4 inches by 4 inches ; cavities, absent ; iron pyrites occur in small patches and strings, and in these patches and strings fine gold occurs ; fracture of quartz, uneven ; lustre, vitreous. Proportion of pyrites, scarcely any. From the Eaglehawk Union Reef, Maldon. Depth from the surface at which specimen was obtained, 500 feet ; width of the reef, 7 feet. M.O., Eaglehawk Union Quartz Mining Company.—E., R. Nankivell, mining surveyor, Maldon.
- 721 (55) Greyish-white amorphous translucent Quartz, 4 inches by 4 inches by 2 inches ; cavities, absent ; zinc blende occurs in strings and patches in the quartz ; iron pyrites, in shales, is attached to one face of the specimen ; fracture of the quartz, uneven ; lustre, vitreous. Proportion of pyrites, scarcely any. From the Eaglehawk Reef, Maldon. Depth from the surface at which the specimen was obtained, 560 feet. M.O., the Eaglehawk Company (Limited).—E., Thomas Hale, mining registrar, Daylesford.

- 722 (56) Amorphous translucent brownish-white Quartz, 5 inches by 4 inches by 2 inches; prase occurs in the quartz, in patches, and close to the piece of rock adhering to the quartz; a little pyrites occurs in the solid quartz; fracture of the quartz, uneven; lustre, vitreous. Proportion of pyrites, scarcely any. From the Eaglehawk Reef, Maldon. Depth from the surface at which the specimen was obtained, 500 feet. The specimen has a piece of the bounding rock—form the western side of the lode—attached to it. M. O., the Central Eaglehawk Company.—E., R. Nankivell, mining surveyor, Maldon.
- 723 (57) Greyish-white translucent Quartz, 5 inches by 5 inches by 2 inches; cavities few, partly filled with pyrites and mica; iron pyrites occurs in cavities in the stone, and is associated with mica (white); white mica is distributed in more or less quantities throughout the quartz; fracture, even. Proportion of pyrites, small. From the Victoria Reef, Maldon. Depth from the surface at which the specimen was obtained, 230 feet. M.O., the New Chum Company.—E., R. Nankivell, mining surveyor, Maldon.
- 724 (58) Brownish-grey translucent Quartz, 7 inches by 6 inches by 4 inches; cavities, large and numerous; the walls of the cavities are covered with a brown deposit; a little iron pyrites is scattered over the face of the specimen; fracture of the quartz, even; lustre, dull, vitreous. Proportion of pyrites, scarcely any. From the Eaglehawk Reef, Maldon. Depth from the surface at which the specimen was obtained, 450 feet. M.O., the North Eaglehawk United Company's Mine.—E., R. Nankivell, mining surveyor, Maldon.
- 725 (59) Brownish-grey translucent Quartz, 4 inches by 3 inches by 3 inches; arsenical and iron pyrites occurs in the solid quartz, and thin shales of pyrites are observable in the natural divisions of the quartz; attached to the quartz is a piece of the bounding rock, in which is enclosed white mica and pyrites; fracture of the quartz, even; lustre, vitreous. Proportion of pyrites, scarcely any. From the Victoria Reef, Maldon. Depth from the surface at which the specimen was obtained, 230 feet. M.O., New Chum Company.—E., R. Nankivell, mining surveyor, Maldon.
- 726 (60) Brownish-grey translucent Quartz, 4 inches by 3 inches by 2 inches; enclosed in the quartz are found in association arsenical pyrites and mica, with brownish and greenish clay slate; fracture, even; lustre, dull vitreous. Proportion of pyrites, not large. From the Victoria Reef, Maldon. Depth from the surface at which the specimen was obtained, 236 feet. M.O., the New Chum Company.—E., R. Nankivell, mining surveyor, Maldon.
- 727 (61) Greyish-white highly translucent Quartz, 3 inches by 2 inches by 2 inches; attached to one end of the specimen is a piece of the granitic bounding rock, which contains a quantity of small plates of white mica; fracture of the specimen,

- even; lustre, vitreous. Proportion of pyrites, absent. From the Wattle Gully Reef, Maldon. Depth from the surface at which the specimen was obtained, 80 feet. M.O., the Wattle Gully Company.—E., R. Nankivell, mining surveyor, Maldon.
- 728 (62) Milk-white very translucent Quartz, 7 inches by 5 inches by 3 inches; zinc blende and galena occur in large patches in the quartz; iron pyrites and zinc blende are visible in a disjointed thin vein; fracture of the quartz, even; lustre, not unlike Carrara marble, especially on one face. Proportion of pyrites, scarcely any. From the Eaglehawk Reef, Maldon. Depth from the surface at which the specimen was obtained, 560 feet. M.O., the Eaglehawk Company (Limited).—E., R. Nankivell, mining surveyor, Maldon.
- 729 (63) Bluish-white translucent Quartz (three specimens). Iron pyrites occurs in the quartz and in the slate casing which covers an end of one of the specimens; a piece of the bounding rock is attached to one specimen; ruddy-coloured gold is visible in the specimens; fracture, even; lustre, resinous. Proportion of pyrites, scarcely any. From the Eaglehawk Reef, Maldon. Depth from the surface at which the specimen was obtained, 500 feet. M.O., Central Eaglehawk Company.—E., R. Nankivell, mining surveyor, Maldon.
- 730 (64) Rock, dense brown, bounding the reef and containing quartz-veins, 9 inches by 4 inches by 4 inches. Pyrites occurs in thin veins in the rock and patches in the quartz; molybdenite is visible in one vein; fracture of the rock sub-conchoidal. Proportion of pyrites, scarcely any. From the United Central Gold Mining Company's Mine, Maldon. Depth from the surface at which the specimen was obtained, 320 feet; got from a shaft at a distance of 40 feet from the reef; a little gold has been found in the veins. M.O., the United Central Gold Mining Company.—E., R. Nankivell, mining surveyor, Maldon.
- 731 (65) Bluish-white translucent Quartz, 6 inches by 4 inches by 2 inches; laminated by black carbonaceous clay slate, in which is arsenical pyrites, yellow pyrites, galena, and gold; gold occurs also at one place with zinc blende, and in others associated with pyrites and galena; zinc blende is scattered through the quartz in small patches, fracture uneven, lustre vitreous. Proportion of pyrites, very small. From the Hustler's Reef (saddle formed), Sandhurst. Depth from the surface at which the specimen was obtained, 640 feet; depth of the water-line, 90 feet; width of the reef, 3 feet; average yield of gold per ton, 2 ozs. 10 dwts. M.O., the Great Extended Hustler's Reef Quartz Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 732 (66) Compact hard bluish-white translucent Quartz, 6 inches by 5 inches by 3 inches; laminated by black carbonaceous clay slate, in which is iron and arsenical pyrites, galena, and gold; gold is found associated with pyrites and galena, and on one smooth waxed-like face it is observable in the heart of the

- copper-coloured pyrites; fracture uneven; lustre, dull vitreous. Proportion of pyrites, very small. From the Hustler's Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 740 feet; depth of the water-line, 90 feet; width of the reef, 4 feet; average yield of gold per ton, 6 ozs. M.O., the Great Extended Hustler's Reef Quartz Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 733 (67) Amorphous bluish-white translucent Quartz, 6 inches by 5 inches by 3 inches; cavities few, empty and partly filled with pyrites: laminated by black carbonaceous clay slate, in which occur iron and arsenical pyrites, galena, and gold; zinc blende is in the solid quartz in patches; fracture uneven; lustre, vitreous. Proportion of pyrites, very small. From the Hustler's Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 740 feet; depth of the water-line, 90 feet; width of the reef, 4 feet; average yield of gold per ton, 6 ozs. M.O., the Great Extended Hustler's Reef Quartz Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 734 (68) Hard white amorphous Quartz, 4 inches by 3 inches by 1 inch; a vein of galena, in which zinc blende, arsenical pyrites, and gold occur, passes through the middle of the specimen; cavities numerous, more or less filled with clay slate, pyrites, galena, and zinc blende; galena occurs in thin strings in the solid quartz; fracture uneven; lustre, vitreous. Proportion of pyrites, very small. From the Catherine and St. Mungo Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 520 feet; width of the reef, 3 feet 6 inches; average yield of gold per ton, 33 ozs. 17½ grs. M.O., the Princess Alice Company.—E., N. G. Stephens, mining registrar, Sandhurst.
- 735 (69) Amorphous milk-white Quartz, 5 inches by 4 inches by 3 inches; cavities, numerous, more or less filled with arsenical pyrites, galena, zinc blende, and gold; a vein of the sulphides and gold above mentioned passes through the quartz; the gold is associated with the pyrites and galena; fracture uneven; lustre vitreous. Proportion of pyrites, small. From the Catherine and St. Mungo Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 520 feet; width of the reef, 3 feet 6 inches; average yield of gold per ton, 33 ozs. 17½ grs. M.O., the Princess Alice Company.—E., N. G. Stephens, mining registrar, Sandhurst.
- 736 (70) Black and bluish-white translucent Quartz, 5 inches by 4 inches by 3 inches; cavities, numerous, more or less filled with pyrites, galena, zinc blende, clay slate, and gold; arsenical pyrites occurs in the quartz in isolated heavy patches; gold is visible in association with arsenical pyrites and galena; the walls of the cavities are lined by what miners call "mice eaten" quartz; fracture uneven; lustre dull, vitreous. Proportion of pyrites, not large. From the 520 feet

level 1102 tons of quartz have been raised, which yielded 4269 ozs. 8 dwts. of gold. From the Catherine and St. Mungo Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 520 feet; width of the reef, 3 feet 6 inches; average yield of gold per ton, 3 ozs. 17½ grs. M.O., the Princess Alice Company.—E., N. G. Stephens, mining registrar, Sandhurst.

- 737 (71) Brown-pink Quartz, 5 inches by 4 inches by 2 inches; the specimen is impregnated with clay slate and oxide of iron; black oxide of manganese is visible in the quartz; fracture uneven; lustre dull, vitreous. Proportion of pyrites, absent. From the London Reef, Wandiligong.—E., L. C. Kinchela, mining registrar, Bright.
- 738 (72) Block of bluish-white amorphous Quartz, 6 inches by 4 inches by 4 inches; laminated irregularly by dark blue clay slate, in which is iron, pyrites, and gold; fracture uneven; lustre dull. Proportion of pyrites, scarcely any. From the Myrtle Reef, Wandiligong.—E., L. C. Kinchela, mining registrar, Bright.
- 739 (73) Brown, pink, and white Quartz, 5 inches by 4 inches by 3 inches; cavities, few empty and others partly filled with clay, pyrites, and gold; laminated at one end of the block; the faces of the laminæ are partly covered with clay, decomposing pyrites, and gold; gold occurs in the solid quartz; black oxide of manganese is visible on the natural fracture of the specimen; fracture uneven; lustre vitreous. Proportion of pyrites very small. From the Magpie Reef, Woolshed, Ovens River. Depth from the surface at which the specimen was obtained, 150 feet; width of the reef, 2 feet; average yield of gold per ton, 2 ozs. 1 dwt. M.O., Messrs. Osborne and M'Farlane.—E., L. C. Kinchela, mining registrar, Bright.
- 740 (74) Amorphous bluish-white Quartz, 5 inches by 3 inches by 2 inches; laminated regularly by blue clay slate, in which a little iron pyrites and very fine gold occurs; iron pyrites is visible on one side of the specimen in shales; fracture even; lustre dull. Proportion of pyrites, scarcely any. From the Good Hope Reef, Crooked River. Depth from the surface at which the specimen was obtained, 500 feet; width of the reef, 8 inches; average yield of gold per ton, 1 oz. 10 dwts. M.O., the Good Hope Company.—E., James Travis, mining registrar, Grant.
- 741 (75) Compact bluish-white Quartz, 3 inches by 3 inches by 2 inches; laminated irregularly by blue clay slate; fine gold and a little galena occurs in the laminæ; fracture uneven; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Good Hope Reef, Crooked River. Depth from the surface at which the specimen was obtained, 500 feet; width of the reef, 8 inches; average yield of gold per ton, 1 oz. 10 dwts. M.O., the Good Hope Company.—E., James Travis, mining registrar, Grant.

- 742 (76) White amorphous pink Quartz (two specimens). Cavities contain gold and cream-coloured clay, laminated regularly by clay slate; fine gold occurs in the laminae and in the cavities; fracture even in one specimen, and splintery in the other; lustre dull, vitreous. Proportion of pyrites, absent. From the Bright Star Mine, Crooked River. Depth from the surface at which the specimen was obtained, 42 feet; width of the reef, 6 inches; average yield of gold per ton, from 1 oz. to 2 ozs. 5 dwts. M.O., the Bright Star Company.—E., James Travis, mining registrar, Grant.
- 743 (77) Bluish-white hard Quartz, 3 inches by 2 inches by 1 inch; cavities numerous and empty; the walls are covered by what miners term "mice-eaten" quartz; fine gold occurs in the laminae and in the solid quartz; fracture, smooth; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Little Dorrit Reef, Crooked River. Depth from the surface at which the specimen was obtained, 150 feet; width of the reef, 4 inches; average yield of gold per ton, 19 dwts. M.O., the Little Dorrit Company.—E., James Travis, mining registrar, Grant.
- 744 (78) Bluish-white amorphous hard Quartz (five specimens); laminated by greenish-blue clay slate; gold occurs in the slate; pyrites, galena, and zinc blende occur in the laminae and in the solid quartz; iron and magnetic pyrites, zinc blende and galena are visible in patches through the stone; fracture uneven; lustre vitreous. Proportion of pyrites, very small. From the Temperance Company, Little Bendigo. Depth from the surface at which the specimen was obtained, 750 feet; width of the reef, 1 foot 8 inches; average yield of gold per ton, 9 dwts. 3 grs. M.O., the Temperance Company.—E., David Christy, mining registrar, Ballarat.
- 745 (79) Amorphous bluish-white translucent Quartz (two specimens); laminated by greenish-blue clay slate; very fine gold is visible in the laminae of the smaller specimen; gold is in association with galena and iron pyrites; the sulphides occur in the laminae; fracture even; lustre dull and vitreous. Proportion of pyrites, scarcely any. From the Temperance Company, Little Bendigo, Ballarat. Depth from the surface at which the specimen was obtained, 850 feet; width of the reef, 1 foot 8 inches; average yield of gold per ton, 9 dwts. 3 grs. M.O., the Temperance Company.—E., David Christy, mining registrar, Ballarat.
- 746 (80) Amorphous bluish-white Quarz, 3 inches by 2 inches by 2 inches; cavities large, more or less filled by clay slate, pyrites, zinc blende, and galena; gold is visible near to a cavity; fracture of quartz smooth; lustre vitreous. Proportion of pyrites, very small. From the Star Reef, Ballarat. Depth from the surface at which the specimen was obtained, 400 feet. M.O., the Sovereign Company.—E., David Christy, mining registrar, &c., Ballarat.

- 747 (81) Dense bluish-white translucent Quartz (two specimens); one face covered with cavities, in which occur zinc blende and iron pyrites; some of the iron pyrites is in perfect cubes and massive; fracture of the quartz even; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Star Reef, Ballarat. Depth from the surface at which the specimen was obtained, 640 feet. The largest specimen was got from the hanging wall of the reef and the smaller from the foot-wall. M.O., the Sovereign Company.—E., David Christy, mining registrar, Ballarat.
- 748 (82) Bluish-white hard translucent Quartz (seven specimens); faces of the specimens and cavities are formed of “mice-eaten” quartz, in which is embedded zinc blende, and in the zinc blende is gold and crystals of iron pyrites; some of the cavities are partly filled with clay slate, iron pyrites, and galena; the principal part of two of the stones is composed of pyrites; fracture uneven; lustre vitreous. Proportion of pyrites, not large. From the Star Reef, Ballarat. Depth from the surface at which the specimen was obtained, 710 feet. M.O., the Sovereign Company.—E., David Christy, mining registrar, Ballarat.
- 749 (83) Bluish-white and brown-pink Quartz, 3 inches by 2 inches by 2 inches; cavities numerous and large, partly filled with iron pyrites and clay; the walls of the cavities are covered by “mice-eaten” quartz; some of the pyrites is decomposing; gold is visible in the solid quartz; fracture, even; lustre, vitreous. Proportion of pyrites, very small. From the Llanberris Company, Ballarat. Depth from the surface at which the specimen was obtained, 150 feet; width of the reef, 5 inches; average yield of gold per ton, 1 dwt. 15 grs. M.O., the Llanberris Company.—E., David Christy, mining registrar, Ballarat.
- 750 (84) Bluish-white translucent Quartz, 2 inches by 1 inch by 1 inch; cavities large and numerous, partly filled with white clay; gold is visible in one of the cavities, and in the solid quartz; fracture uneven; lustre vitreous. Proportion of pyrites, absent. From the Llanberris Company, Ballarat. Depth from the surface at which the specimen was obtained, 200 feet; width of the reef, 5 inches; average yield of gold per ton, 1 dwt. 13 grs. M.O., the Llanberris Company.—E., David Christy, mining registrar, Ballarat.
- 751 (85) Translucent bluish Quartz, $2\frac{1}{2}$ inches by $1\frac{1}{2}$ inches by 1 inch; cavities numerous and empty; one end of the specimen is covered by a piece of the bounding slate rock and the other by a cream-coloured clay, in which cubes of iron pyrites are embedded; heavy gold with pyrites is visible in the solid quartz; fracture smooth; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Llanberris Company, Ballarat. Depth from the surface at which the specimen was obtained, 300 feet; width of leader from 2 to 3 inches. M.O., the Llanberris Company.—E., David Christy, mining registrar, Ballarat.

- 752 (86) Dense white Quartz, 6 inches by 3 inches by 3 inches, a large piece of slate rock is attached to one end of the specimen; laminated irregularly by light blue clay slate; fine gold occurs in the quartz close to the laminae; fine acicular arsenical pyrites is distributed through the slate rock; fracture uneven; lustre dull. Proportion of pyrites, scarcely any. From the Cohen's Reef, east vein, Stringer's Creek. Depth beneath the water-line at which the specimen was obtained, 18 feet; width of the reef, 8 feet; average yield of gold per ton, 2 ozs. M.O., the Walhalla Gold Mining Company (Registered).—E., E. S. Gutteridge, mining registrar, Walhalla. From the commencement of operations in this mine to the 9th August, 1875, 77,614 tons of quartz have been raised and crushed, which yielded 108,974 ozs. 16 dwts. 10 grs. of gold of £381,988 7s. 10d. value. The average yield of gold per ton was 1 oz. 8 dwt. 1·94 grs. Total amount of dividends paid, £193,678 9s. 9d., or £322 15s. 11¼d. per 600th share.
- 753 (87) Brownish-pink and white Quartz, 7 inches by 5 inches by 3 inches; one end of the specimen is laminated by clay slate, which is full of fine acicular arsenical pyrites; the faces of the laminae show striated lines; gold is visible close to the lines of the laminae in the quartz; fracture uneven; lustre dull, vitreous. Proportion of pyrites, very small. From the Cohen's Reef, main lode, Stringer's Creek. Depth beneath the water-line at which the specimen was obtained, 130 feet; width of the reef, 9 feet; average yield of gold, 10 ozs. M.O., the Walhalla Gold Mining Company.—E., E. S. Gutteridge, mining registrar, Walhalla.
- 754 (88) Dense greyish-white hard Quartz, 6 inches by 5 inches by 2 inches; laminated irregularly by bluish and greenish yellow clay slate; fine iron pyrites and arsenical pyrites are embedded in the slate; fracture uneven; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Cohen's Reef, main lode, Walhalla. Depth beneath the water-line at which the specimen was obtained, 365 feet; width of the reef, 10 feet; average yield of gold per ton, 15 dwts. M.O., the Walhalla Gold Mining Company (Registered).—E., E. S. Gutteridge, mining registrar, Walhalla.
- 755 (89) Bluish and grey white translucent Quartz, 6 inches by 4 inches by 2 inches; cavities few and small, formed by the planes of crystals; laminated by bluish and greenish clay slate; fine gold and fine arsenical pyrites occur in the laminae; one side of the quartz is smooth, and has a waxy-like lustre, as if it had been smoothed by the action of mineral waters; fracture uneven; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Cohen's Reef, main western lode, Walhalla. Depth below the adit level or water line at which the specimen was obtained, 423 feet; width of the reef, 9 feet; average yield of gold per ton, 2 ozs. 1 dwt. 18 grs.

M.O., the Long Tunnel Gold Mining Company (Registered).—E., E. S. Gutteridge, mining registrar, Walhalla.

- 756-757 (90) Brown-pink, and greyish-white Quartz (two specimens); blue clay slate is attached to one end of each specimen, and the slate is traversed by thin quartz veins; the slate is densely impregnated with acicular arsenical pyrites; some of the slate is enclosed in the quartz; fine gold is visible in the solid quartz, and at one place close to a patch of bournonite; fracture of the quartz smooth; lustre dull, vitreous. Proportion of pyrites, very small. From the Cohen's Reef, main lode, Walhalla. Depth below the water-line at which the specimen was obtained, 50 feet; width of the reef, 5 feet; average yield of gold per ton, 2 ozs. 1 dwt. 18 grs. M.O., the Long Tunnel Gold Mining Company, Registered.—E., E. S. Gutteridge, mining registrar, Walhalla.
- 758 (91) Compact bluish-white Quartz, 3 inches by 2 inches by 1 inch; laminated regularly by greenish-blue clay slate; iron pyrites and acicular arsenical pyrites are distributed in the laminæ, the latter in fine crystals, plentiful; one end of the specimen is covered by clay slate full of pyrites, which shows traces of striæ; fracture even; lustre dull. Proportion of pyrites, very small. From the Cohen's Reef, Walhalla. Depth below the adit level, or water-line, at which the specimen was obtained, 243 feet; width of the reef, 9 inches. M.O., the Long Tunnel Gold Mining Company (Registered).—E., E. S. Gutteridge, mining registrar, Walhalla.
- 759 (92) Hard bluish-white Quartz, 3 inches by 2 inches by 1 inch; laminated by greenish-blue clay slate; the laminæ contain arsenical pyrites and much fine gold; fracture even; lustre dull. Proportion of pyrites, scarcely any. From Cohen's Reef, main western lode, Walhalla. Depth below the adit level, or water-line, at which the specimen was obtained, 323 feet; width of the reef, 10 feet; average yield of gold per ton, 2 ozs. 1 dwt. 18 grs. M.O., the Long Tunnel Gold Mining Company (Registered).—E., E. S. Gutteridge, mining registrar, Walhalla.
- 760 (93) Greyish-white amorphous Quartz, 4 inches by 3 inches by 3 inches; cavities few and small, formed by the planes of crystals; patches of dark-blue clay slate are scattered through the specimen; fine acicular arsenical pyrites is plentifully distributed in the specimen; bournonite is sprinkled through the quartz; fracture uneven; lustre dull. Proportion of pyrites, scarcely any. From the Cohen's Reef, eastern part of the main lode, which is divided by a "slate horse," Walhalla. Depth below the adit level, or water-line, at which the specimen was obtained, 423 feet; width of the reef, 5 feet; average yield of gold per ton, 2 ozs. 1 dwt. 18 grs. M.O., the Long Tunnel Gold Mining Company (Registered).—E., E. S. Gutteridge, mining registrar, Walhalla.

- A. Slate Rock. From a wall of the main lode, containing iron pyrites and quartz.
- B. Dark-blue Clay Slate. From a wall of the main lode, containing acicular arsenical and iron pyrites.
- 761 (94) Bluish-white amorphous translucent Quartz, 3 inches by 2 inches by 1 inch; laminated regularly by dark-blue clay slate; acicular arsenical pyrites is thickly disseminated through the slate; fracture uneven; lustre dull, vitreous. Proportion of pyrites, very small. From the Cohen's Reef, main lode, Walhalla. Depth from the surface at which the specimen was obtained, 200 feet; width of the reef, 4 feet; average yield of gold per ton, 11 dwts. M.O., the New North Gippsland Gold Mining Company (Registered).—E., E. S. Guttridge, mining registrar, Walhalla.
- 762 (95) Amorphous brown-pink Quartz, 4 inches by 4 inches by 3 inches; the natural divisions of the quartz are covered by a deposit of oxide of iron; fine gold is visible in the centre of the solid quartz, and on one of the faces with oxide of iron; fracture of the quartz smooth, lustre vitreous. Proportion of pyrites, absent. From the Parker's Extended Mine, Gordon. Depth from the surface at which the specimen was obtained, 200 feet; depth of the water-line not reached; width of the reef, 3 feet 6 inches; average yield of gold per ton, 17 dwts. M.O., the Parker's Extended Company.—E., Thomas Cowan, mining surveyor, Ballarat.
- 763 (96) Amorphous brown-pink translucent Quartz, 3 inches by 2 inches by 1 inch; cavities numerous, partly filled with galena and gold; fine gold is visible in the solid quartz in association with galena and zinc blende, and by itself; fracture smooth; lustre dull, vitreous. Proportions of pyrites, absent. From the Parker's Extended Mine, Gordon. Depth from the surface at which the specimen was obtained, 140 feet; water-line not yet reached; width of the reef, 2 feet 6 inches; average yield of gold per ton, 4 ozs. 10 dwts. M.O., the Parker's Extended Company.—E., Thomas Cowan, mining surveyor, Ballarat.
- 764 (97) Brown-pink Quartz (three small specimens); cavities numerous, partly filled with fine gold and oxide of iron; galena is visible in the stone; fracture uneven; lustre vitreous. Proportion of pyrites, absent. From the Parker's Reef Extended Mine, Gordon. Depth from the surface at which the specimen was obtained, 230 feet; water line not reached; width of the reef, 5 feet 6 inches; average yield of gold per ton, 1 oz. 15 dwts. M.O., the Parker's Extended Company.—E., Thomas Cowan, mining surveyor, Ballarat.
- 765 (98) Amorphous bluish-white translucent Quartz, 2 inches by 2 inches by 1 inch; cavities more or less filled with clay slate, iron pyrites, heavy gold, and zinc blende; the gold is associated with the zinc blende and pyrites, it is also found in the solid quartz; fracture, uneven; lustre, dull, vitreous. Pro-

portion of pyrites, very small. From the Black Hill Mine, Ballarat. Depth from the surface at which the specimen was obtained, 400 feet; depth of the water-line, 50 feet; width of the reef, 10 feet; average yield of gold per ton, not known. M. O., the Black Hill Company.—E., Thomas Cowan, mining surveyor, Ballarat.

- 766 (99) Bluish-white translucent Quartz (two specimens); cavities numerous and partly filled with iridescent pyrites, galena, stibnite, and gold; laminated regularly by black carbonaceous clay slate, in which much arsenical pyrites and gold occur; heavy gold is found associated with galena and arsenical pyrites; the sulphides, zinc blende and acicular crystals of stibnite, occur in cavities and in the solid quartz; fracture, even; lustre, vitreous. Proportion of pyrites, very small. From the Garden Gully Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 400 feet; depth of the water-line, 70 feet; width of the reef, from 6 inches to 3 feet; average yield of gold per ton, 2 oz. M. O., the Garden Gully United Quartz Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 767 (100) White, bluish-white, and brown-pink Quartz (three specimens); cavities few, more or less filled with pyrites, clay slate, and gold; iron pyrites, zinc blende, and galena occur massive in the specimens; gold is visible in the solid quartz and associated with the pyrites and galena; some of the pyrites is iridescent; fracture, uneven; lustre, vitreous. Proportion of pyrites, not large. From the Garden Gully Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 300 feet; depth of the water-line, about 70 feet; width of the reef, from 1 to 6 feet; average yield of gold per ton, 15 dwts. M. O., the Garden Gully United Quartz Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 768 (101) Bluish-white translucent, hard Quartz, 5 inches by 4 inches by 3 inches; laminated by black polished carbonaceous clay slate; in the laminæ occur arsenical pyrites, galena, and gold; fracture, uneven; lustre, vitreous. Proportion of pyrites, scarcely any. From the Garden Gully Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 310 feet; depth of the water-line, 80 feet; width of the reef, from 1 to 4 feet; average yield of gold per ton, 11 dwts. 3 grains. M. O., the Cornish United Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.
- 769 (102) Dark bluish-white Quartz, 4 inches by 3 inches by 3 inches; laminated regularly by black carbonaceous polished slate; the laminæ are very numerous, and contain arsenical pyrites; gold is visible in the arsenical pyrites; zinc blende occurs sparingly in the specimen; fracture smooth; lustre vitreous. Proportion of pyrites, scarcely any. From the Garden Gully Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 510 feet; depth of the

water-line, 80 feet; average yield of gold per ton, scarcely payable. M.O., the Cornish United Mining Company (Registered).—E., N. G. Stephens, mining registrar, Sandhurst.

A. Slate with Quartz-vein. From the bounding wall of the Garden Gully Reef at the 510 feet level. In the quartz vein are pyrites and a little gold.

770 (103) White translucent Quartz, 5 inches by 4 inches by 3 inches, massive arsenical pyrites occupies the greater part of the specimen; in the pyrites occurs a little galena; gold is visible in the pyrites; fracture uneven; lustre vitreous. Proportion of pyrites, more pyrites than quartz. From the Mundic lode, Garden Gully Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 676 feet; depth of the water-line, 140 feet. M.O., the Victory Gold Mining Company (No Liability).—E., N. G. Stephens, mining registrar, Sandhurst.

771 (104) Block of amorphous bluish-white Quartz, 6 inches by 4 inches by 4 inches; laminated by dark clay slate irregularly; arsenical pyrites, zinc blende, gold, and acicular crystals of stibnite occur in the laminae, the sulphides and gold are scattered in patches through the stone; gold is associated with each of them; fracture uneven; lustre vitreous. Proportion of pyrites, very small. From the Garden Gully Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 676 feet; depth of the water-line, 140 feet; the width and yield of gold from this reef are not yet known, though it is said to be a permanent reef, and the stone is considered to be payable. M.O., the Victory Gold Mining Company (No Liability).—E., N. G. Stephens, mining registrar, Sandhurst.

772 (105) Milk-white compact translucent Quartz, 4 inches by 3 inches by 3 inches; the specimen is traversed by an irregular lamination of slate; a thin vein of calcite about the eighth of an inch in width separates the walls of this lamina; gold is associated with the arsenical pyrites, galena, zinc blende, and acicular crystals of stibnite in the specimen; the sulphides are distributed in patches in the quartz in association with each other; fracture uneven; lustre vitreous. Proportion of pyrites, very small. From the Garden Gully Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 670 feet; depth of the water-line, about 100 feet; width of the reef, from 6 to 20 feet; (the specimen was got from the widest part of the reef) average yield of gold per ton, 1 oz. 4 dwts. 22 grains. M.O., the Pandora Company.—E., N. G. Stephens, mining registrar, Sandhurst. The yield of gold from 5242 tons of quartz crushed from the reef of which the specimen is a sample was 6523 ozs. 2 dwts. 12 grs.

A. This is a specimen of the "lava streak," as it is termed by the miners. This basaltic dyke is associated with the Garden Gully Reef, and is considered to be a sure guide to the reef.

- 773 (106) Bluish-white amorphous translucent Quartz, 7 inches by 5 inches by 2 inches; galena, zinc blende, and gold are associated in one spot in the specimen; a little galena, zinc blende and gold are scattered through the specimen separate from each other; dark-blue clay slate covers one end of the specimen, about its margin zinc blende is visible; calcite occurs in the centre of the solid quartz; fracture uneven; lustre vitreous; proportion of pyrites, scarcely any. From the Victoria Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 560 feet; depth of the water-line, 150 feet; width of the reef, 5 feet (the reef varies from 1 foot to 20 feet; average yield of gold per ton, from 15 dwts. to 1 oz. M.O., Geo. Lansell.—E., N. G. Stephens, mining registrar, Sandhurst.
- 774 (107) Milk-white amorphous translucent Quartz, 5 inches by 4 inches by 2 inches; bluish-green clay slate occurs in the quartz in isolated patches; a little iron pyrites occurs in the slate; fracture of the quartz, even—it appears like cleavage in one direction; lustre, vitreous; proportion of pyrites, scarcely any. From Victoria Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 700 feet; depth of the water-line, 150 feet; width of the reef, 7 feet (varying from 1 foot to 20 feet); average yield of gold per ton, from 15 dwts. to 1 oz. M.O., Geo. Lansell.—E., N. G. Stephens, mining registrar, Sandhurst.
- 775 (108) Bluish-white hard Quartz (two specimens); cavities, numerous, partly filled with clay slate, zinc blende, and arsenical pyrites; the pyrites occurs massive in one specimen; gold is visible in the quartz; fracture, smooth—it appears like cleavage in one direction; lustre, vitreous. From the Prince Alfred Reef, Sandhurst. Depth from the surface at which the specimen was obtained, 200 feet; depth of the water-line, 80 feet; width of the reef, 110 feet; average yield of gold per ton, $4\frac{1}{2}$ dwts. M.O., the Great Britain Mining and Drainage Company.—E., N. G. Stephens, mining registrar, Sandhurst.
- 776 (109) Brown-pink and greyish-white Quartz (three specimens); cavities few, partly filled by oxide of iron, pyrites, and gold; laminated irregularly by blue and grey clay slate; fine gold occurs in the cavities of the laminæ; iron pyrites is embedded in the solid quartz; fracture uneven; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Prince of Wales Reef, between Maryborough and Amherst. Depth from the surface at which the specimen was obtained, 140 feet; depth of the water-line, 90 feet; width of the reef, 3 feet; average yield of gold per ton, 7 dwts. M.O., the Prince of Wales Company.—E., P. Virtue, junior, mining registrar, Maryborough.
- 777 (110) Block of Sandstone with vein of Quartz, 5 inches by 4 inches by 3 inches; cubical cavities in the sandstone numerous,

caused by the decomposition of pyrites; the vein is composed nearly wholly of crystals of quartz. Proportion of pyrites, absent. From the Balaclava Hill, Whroo. Depth from the surface at which the specimen was obtained, 100 feet; width of the reef, 2 feet 6 inches; average yield of gold per ton, 16 dwts. M.O., the Balaclava Hill Tribute Company.—E., Henry Hicks, mining registrar, Rushworth.

- 778 (111) Brown-pink Quartz, 5 inches by 5 inches by 2 inches; cavities numerous, formed by the planes of crystals; in one end of the specimen slate is enclosed in the quartz; cavities in the slate left by the decomposition of pyrites; fracture uneven, lustre vitreous. Proportion of pyrites, absent. From Balaclava Hill, Whroo. Depth from the surface at which the specimen was obtained, 50 feet to 100 feet; width of the reef, 2 feet; average yield of gold per ton, 1 oz. 4 dwts. 12 grs.—E., Henry Hicks, mining registrar, Rushworth.
- 779 (112) Bluish-white translucent Quartz, 4 inches by 4 inches by 2 inches; cavities numerous, formed by the planes of crystals; many small cavities are on one face of the stone, partly or wholly filled with yellow clay; a little fine gold is visible in the stone; fracture uneven; lustre vitreous. Proportion of pyrites, absent. From the Result, or Black Reef, White Hills, Rushworth. Depth from the surface at which the specimen was obtained, 100 to 150 feet; width of the reef, 2 feet; average yield of gold per ton, 10 ozs.—E., Henry Hicks, mining registrar, Rushworth.
- 780 (113) Brown-pink and greyish-white Quartz (two specimens); cavities numerous, formed by the planes of small crystals; iron pyrites is imbedded in the solid quartz; fine gold is visible in the cavities and quartz; the natural fractures are covered by ferruginous clay and oxide of iron; fracture uneven; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Rose of Denmark Reef, Rushworth. Depth from the surface at which the specimen was obtained, 70 feet; width of the reef, 7 feet; average yield of gold per ton, 8 dwts.—E., Henry Hicks, mining registrar, Rushworth.
- 781 (114) Brown-pink and bluish-white Quartz (three specimens); cavities partly filled with oxide of iron, pyrites, and gold; galena, with fine gold, occurs in the solid quartz; clay slate is attached to the side of one specimen; fracture uneven; lustre vitreous. Proportion of pyrites, scarcely any. From the Doctor's Reef, White Hills, Rushworth. Depth from the surface at which the specimen was obtained, 100 feet; width of the reef, 7 feet; average yield of gold per ton, 8 dwts.—E., Henry Hicks, mining registrar, Rushworth.
- 782 (115) Brown and bluish-white Quartz, 3 inches by 2 inches by 1 inch; cavities few, formed by planes of crystals, partly filled with oxide of iron and gold; the natural fractures of the specimen are covered with oxide of iron and ferruginous

clay; fracture smooth; lustre vitreous. Proportion of pyrites, absent. From the Nuggety Hill Reef, Rushworth. Depth from the surface at which the specimen was obtained, 130 feet; width of the reef, 3 to 4 feet; average yield of gold per ton, 1 oz.—E., Henry Hicks, mining registrar, Rushworth.

- 783 (116) Block of brown Quartz, 4 inches by 4 inches by 3 inches; cavities few, partly filled with oxide of iron; the stone is taken from the vein without fracturing its natural faces; these faces are covered by oxide of iron; two sides of the specimen are covered with ferruginous clay slate; fracture uneven; lustre dull. Proportion of pyrites, absent. From the Frenchman's Reef, Rushworth. Depth from the surface at which the specimen was obtained, 120 feet; width of the reef, 5 inches; average yield of gold per ton, 16 dwts. M.O., the Happy-go-Lucky Company.—E., Henry Hicks, mining registrar, Rushworth.
- 784 (117) Bluish-white and brown-pink Quartz, 5 inches by 5 inches by 4 inches; cavities formed by the planes of crystals; iron pyrites occurs in the laminae on one side of the specimen; galena is in the solid quartz; striated lines are observable on two sides of the specimen; fracture uneven and even; lustre vitreous. Proportion of pyrites, scarcely any. From the Prince of Wales Reef, Amherst. Depth from the surface at which the specimen was obtained, 140 feet; depth of the water-line, 90 feet; width of the reef, 3 feet; average yield of gold per ton, 7 dwt. M.O., the Prince of Wales Company.—E., Joseph Smith, mining registrar, Talbot.
- 785 (118) Brown-pink and white quartz, 8 inches by 5 inches by 3 inches; cavities small and numerous, partly filled with clay slate and oxide of iron; fine iron pyrites occurs in the solid quartz; only on one face is the quartz fractured, the others are separated with the natural divisions of the specimen, and they are covered by oxide of iron; fracture uneven; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Prince of Wales Reef, Amherst. Depth from the surface at which this specimen was obtained, 80 feet; depth of the water-line, 90 feet; width of the reef, 3 feet; average yield of gold per ton, 7 dwts. M.O., the Prince of Wales Company.—E., Joseph Smith, mining registrar, Talbot.
- 786 (119) Piece of brown-pink and white Quartz, 6 inches by 4 inches by 3 inches; cavities formed by planes of crystals, nearly empty, a little gold is visible in one; zinc blende and iron pyrites occurs in the solid quartz; fracture uneven; lustre dull, vitreous. Proportion of pyrites, scarcely any. From the Prince of Wales Reef, Amherst. Depth from the surface at which the specimen was obtained, 100 feet; depth of the water-line, 93 feet; width of the reef, 3 feet; average yield of gold per ton, 17 dwts. M.O., Messrs. Busch and Co.—E., Joseph Smith, mining registrar, Talbot.

- 787 (120) White-brown and brown-pink Quartz, 4 inches by 3 inches by 3 inches; cavities numerous on one face, which is partly covered by greenish clay slate; gold is visible in one cavity; the faces of the specimen are covered by oxide of iron; fracture uneven; lustre dull. Proportion of pyrites, absent. From the Udney Reef, Lexton. Depth from the surface at which the specimen was obtained, 70 feet; depth of the water-line, not known; width of the reef, 5 feet; average yield of gold per ton, 4 dwt. M. O., the Warrior Company.—E., Joseph Smith, mining registrar, Talbot.
- 788 (121) Block of bluish-white translucent Quartz, 7 inches by 5 inches by 4 inches; cavities, numerous; the walls of the cavities are covered with transparent and semi-transparent quartz crystals; light-blue clay slate with iron pyrites cover one side of the specimen; fine gold occurs in the slate: a little iron pyrites is visible in isolated places in the solid quartz; fracture uneven; lustre vitreous. Proportion of pyrites, very small. From the Specimen Hill Mine, Daylesford. Depth from the surface at which the specimen was obtained, 310 feet; width of the reef, 5 or 6 feet; average yield of gold per ton, 10 dwts. M.O., the Specimen Hill Quartz Mining Company.—E., Thomas Hale, mining registrar, Daylesford.
- 789 (122) Brown-pink and white Quartz, 7 inches by 5 inches by 4 inches; cavities, few, formed by the planes of crystals; the natural divisions of the specimen are covered and stained by oxide of iron; one end of the specimen is covered by pale blue clay slate; heavy gold occurs near the slate; fracture uneven; lustre dull, vitreous. Proportion of pyrites, absent. From the Specimen Hill Mine, Daylesford. Depth from the surface at which the specimen was obtained, 383 feet; width of the reef, 5 to 6 feet; average yield of gold per ton, 10 dwts. M.O., the Specimen Hill Quartz Mining Company.—E., Thomas Hale, mining registrar, Daylesford.
- 790 (123) Brownish-white Quartz, 3 inches by 3 inches by 2 inches; cavities numerous, and containing small quartz crystals; one face is smooth and it is at an angle with the imperfect lamination of the specimen; all the faces of the block but one are covered by oxide of iron and clay; fracture uneven; lustre dull. Proportion of pyrites, absent. From the Outward Bound Reef, Merton. Depth from the surface at which the specimen was obtained, 100 feet; average yield of gold per ton, 17 dwts. 22 grs. M.O., the Outward Bound Reef Claimholders.—E., R. W. S. Greig, mining registrar, Alexandra.
- 791 (124) Bluish-white Quartz, 6 inches by 3 inches by 2 inches; cavities numerous, formed by the planes of crystals; the specimen is laminated and is divided with the laminae; gold occurs in the cavities; ferruginous clay covers the faces of the laminae; fracture, uneven; lustre, dull. Proportion of pyrites absent. From the Emu Reef, Parish of Taggerty.

- Depth from the surface at which the specimen was obtained, 100 feet; average yield of gold per ton, 1 oz. 8 dwts.—E., R. W. S. Greig, mining registrar, Alexandra.
- 792 (125) Bluish-white laminated Quartz, 4 inches by 3 inches by 2 inches; cavities few and small; the laminations are numerous and regular; iron pyrites and gold occur in the laminae; the laminations are partly covered with blue clay slate and ferruginous clay; fracture uneven; lustre dull. Proportion of pyrites, small. From the Fiery Reef, Acheron Diggings. Depth from the surface at which the specimen was obtained, 75 feet; average yield of gold per ton, 3 ozs.—E., R. W. S. Greig, mining registrar, Alexandra.
- 793 (126) Bluish-white laminated Quartz, 4 inches by 3 inches by 3 inches; cavities few, small, and empty; they are principally observable in the lines of laminations; the specimen is closely laminated; blue clay slate occurs in the laminae; fracture uneven; lustre dull. Proportion of pyrites, scarcely any. From the Welcome Reef, near Kilmore. Depth from the surface at which the specimen was obtained, 180 feet; average yield of gold per ton, 12 dwts.—E., R. W. S. Greig, mining registrar, Alexandra.
- 794 (127) Block of Arsenical Iron Pyrites with Quartz, 6 inches by 4 inches by 4 inches; cavities few; ferruginous clay and quartz surround the pyrites. Proportion of pyrites, nearly wholly of pyrites. From the Laura Reef, Amherst. Depth from the surface at which the specimen was obtained, 190 feet; depth of the water-line, 200 feet; width of the reef, 6 feet; average yield of gold per ton, 8 dwts.—E., Joseph Smith, mining registrar, Talbot.
- 795 (128) White and bluish-white compact Quartz, 8 inches by 5 inches by 4 inches; laminated irregularly by blue clay slate, in which occur iron pyrites, galena, and much fine gold; zinc blende and gold is visible in the solid quartz and pyrites; fracture uneven; lustre vitreous. Proportion of pyrites, scarcely any. From the Cross Reef, Stawell. Depth from the surface at which the specimen was obtained, 870 feet; width of the reef, 10 feet; average yield of gold per ton, of the portion of the reef from which the stone was taken, 2 ozs. M. O., the Extended Cross Reef Company.—E., H. C. Bate, mining registrar, Stawell.
- 796 (129) Compact bluish-white translucent Quartz (two specimens); dark-blue clay slate and prase are distributed throughout the blocks; a quantity of pyrites is sprinkled over the quartz and slate; thin veins of carbonate of lime intersect the specimen; fracture splintery in one direction and smooth in the other; lustre vitreous. Proportion of pyrites, scarcely any. From the Magdala Mine, Stawell. Depth from the surface at which the specimen was obtained, 1687 feet; the specimens were got from the hanging wall of the reef in the bottom of the shaft; thickness of the reef, not yet proved; average yield of gold

per ton, not yet known. The shaft has been sunk 15 feet into the reef without the lode showing any signs of the footwall. The hanging wall of the reef underlies to the north-west at an angle of 45 degrees. M.O., the Magdala Company.—E., H. C. Bate, mining registrar, Stawell.

FAC-SIMILES OF GOLD NUGGETS FOUND IN VICTORIA.

- 797 The "Beauty" Nugget weighed 242 ozs. It was discovered at a depth of 9 feet from the surface, in Kangaroo Gully, Bendigo, in the year 1858. The gold was $22\cdot2\frac{7}{8}$ carats fine.
- 798 The "Platypus" nugget weighed 377 ozs. 6 dwts. It was found in Robinson Crusoe Gully, Bendigo, in a pillar of earth of a deserted claim. The claim was situated in shallow alluvium, and the nugget was discovered in March, 1861. The gold was $22\cdot1\frac{1}{8}$ carats fine.
- 799 The "Viscount Canterbury" nugget was found in John's Paddock, Berlin Diggings, at a depth of 15 feet from the surface, on the 31st May, 1870. It weighed 1105 ozs. The gold was 23·3 carats fine.
- 800 The "Schlemm" nugget was found at Dunolly on the 11th July, 1872, at a depth of 3 feet beneath the surface. It weighed 538 ozs., and is estimated to contain 60 ozs. of quartz.
- 801 Nugget [not named] found in Broomfield's Gully, Creswick, on the 8th August, 1872. It weighed 24 ozs. 3 dwts., and was got at a depth of 100 feet below the surface.
- 802 The "Kum Tow" nugget weighed 718 ozs. 5 dwts. It was found on the 17th April, 1871, in Catto's Paddock, Berlin Diggings, at a depth of 12 feet 6 inches below the surface. It was found by a party of Chinamen. The gold was 23·3 carats fine.
- 803 The "Viscountess Canterbury" nugget was found on the 3rd October, 1870, at Berlin. It was discovered at 6 feet 6 inches beneath the surface, and weighed 884 ozs. 10 dwts. The gold was $23\cdot2\frac{5}{8}$ carats fine.
- 804 The "Crescent" nugget was found on the 2nd April, 1872, at a depth of 2 feet beneath the surface. It weighed 176 oz. 8 dwt., and was discovered at Berlin.
- 805 Nugget [not named], found at Creswick, in the Key Company's mine. It weighed 32 ozs., and was found in January, 1871.
- 806 and 807 The "Oldham" nuggets, found at Turton's Creek, in April, 1873. They weighed respectively 2 ozs. and 36 ozs., and were got at a depth of 2 feet beneath the surface. The gold was $23\cdot\frac{3}{8}$ carats fine.
- 808 The "Spondulix" nugget was found in November, 1872, at Eureka Gully, Jordan's, near Dunolly. It weighed 130 ozs., and was estimated to contain 29 ozs. of quartz. Discovered at 8 feet beneath the surface in a quartz-vein.
- 809 The "Alma 1" nugget was found on the 14th April, 1873, at Maryborough. It weighed 125 ozs. It was discovered at 120 feet beneath the surface. The gold was 23·1 carats fine.

- 810 Nugget [not named] found in Broomfield's Gully, Creswick, on 12th August, 1872. It weighed 46 ozs. 15 dwts., and was got at 100 feet in depth.
- 811 Nugget [not named] found at Creswick in the Red Streak Lead, on the 31st August, 1872. It was discovered at 180 feet below the surface, and weighed 30 ozs. 1 dwt.
- 812 Nugget [not named] found at Buninyong, on the 21st July, 1875. It was discovered at 73 feet below the surface, and weighed 58 ozs. 5 dwts. The gold was $23\frac{1}{4}$ carats fine.
- 813 Nugget [not named] found at Upper Boggy Creek, on the 9th September, 1873. It was discovered at 4 feet below the surface, and weighed 29 ozs.
- 814 The "Needful" nugget was discovered at 12 feet beneath the surface, in Catto's Paddock, Berlin Diggings, on the 10th May, 1871. It weighed 246 ozs. 16 dwts., and the gold was 23·3 carats fine.
- 815 The "Alma 2" nugget was found at Maryborough, on the 14th April, 1873, at 120 feet beneath the surface. It weighed 15 ozs. The gold was 23·1 carats fine.
- 816 The "Eldorado" nugget was found at Smythesdale on the 26th Aug., 1873, at 155 feet beneath the surface. It weighed 170 ozs.
- 817 The "Lothair" nugget was found at Clunes, at 307 feet beneath the surface, on the 11th July, 1875. It weighed 77 ozs. 6 dwts. The gold was $23\frac{2}{8}$ carats fine.
- 818 Nugget [not named] found at Sandhurst, in Crusoe Gully, on the 13th July, 1875. It was discovered at 3 feet beneath the surface, and weighed 46 ozs.
- 819 Nugget [not named] found at Creswick, at 150 feet below the surface, on the 28th April, 1874. It weighed 53 ozs. The gold was 23·3 carats fine.
- 820 Nugget [not named] found at Ballarat in the Golden Reef Claim, at 200 feet beneath the surface. It weighed 31 ozs. 5 dwts.
- 821 The "Welcome" nugget was found on the 11th June, 1858, at 180 feet beneath the surface, Bakery Hill, Ballarat. It weighed 2195 ozs.

ECONOMIC MINERALS.

- 822 Pyrites, Raw. Obtained from the crushing mill of the Llanberris Quartz Mining Company's Mine, at Ballarat.
- 823 Pyrites, Roasted. It yields 1 oz. 16 dwts. 10 grs. of gold per ton. From the Llanberris Quartz Mining Company's Mine, at Ballarat.
- 824 Pyrites, Raw. From the concentrating buddle of the Walhalla Gold Mining Company's Mine at Walhalla.
- 825 Pyrites, Roasted. From the mine of the Walhalla Gold Mining Company (Registered), Walhalla.
- 826 Pyrites, Ground previous to amalgamation. From the mine of the Walhalla Gold Mining Company (Registered), at Walhalla. The yield of gold from 30 tons of pyrites treated at this mine during the quarter ended 30th September, 1875, was 100 ozs.

9 dwts., or an average yield of nearly 3 ozs. 7 dwts. of gold per ton of pyrites.

- 827 Pyrites, Raw. From the concentrating buddle of the Long Tunnel Gold Mining Company's Mine at Walhalla.
- 828 Pyrites, Roasted. From the mine of the Long Tunnel Gold Mining Company (Registered), Walhalla.
- 829 Pyrites, Ground previous to amalgamation. From the mine of the Long Tunnel Gold Mining Company (Registered), Walhalla. The yield of gold from 77 tons 11 cwt. treated at this mine during the quarter ended 30th September, 1875, was 249 ozs. 7 dwts., or an average yield of 3 ozs. 4 dwts. 6·87 grs. of gold per ton of pyrites.
- 830 Tin Ore. Got from a lode which is situated four miles from Beechworth, on the Woolshed Ranges. The tin occurs in a granular quartz much mixed with white mica, but it is said to be found in greater abundance in a fine grained granite.
- 831 Stream Tin. From the Woolshed Creek, Beechworth. The pure ore from this creek yields 78 per cent of tin. As usually sent to market it is mixed with titaniferous iron, schorl, and a little gold, &c., and gives about 53 per cent. of tin. The stanniferous drift occurs at various depths from the surface to 230 feet beneath it. The drift from the deep mines contains precious stones, including the diamond.
- 832 Stream Tin. From Sebastopol, Beechworth.
- 833 Washdirt, in which the Stream Tin Ore is found in the Cudgewa Creek, Koetong Tinfield, North-Eastern Victoria.
- 834 Stream Tin Ore (medium-sized grain). Got by sluicing the washdirt (No. 833) found in the Cudgewa Creek, Koetong Tinfield.
- 835 Stream Tin Ore (large-sized grains). Got by sluicing the washdirt (No. 833) found in the Cudgewa Creek, Koetong Tinfield. The ore occurs as gravel and sand in the alluvial wash, generally on or near the bedrock, in the creek flats, and in the raised flats and slopes above them. It is found in leads and gutters in a like manner to gold. The depth of sinking varies from (3) three to (6) six or (7) seven feet. The washdirt varies in thickness from a few inches to (3) three feet. A little gold and much titaniferous iron sand are found associated with the tin ore in the washdirt.
- 836 Green and blue Carbonate and grey Copper Ore mixed with Ironstone, Quartz, and Clay. This specimen was taken from the outcrop of the lode in the Thomson River Copper Mine, Gippsland.
- 837 Copper Pyrites. From the Thomson River Copper lode. This sample was got from a new discovery of ore in the Walhalla Copper Mine, Gippsland.
- 838 Oxide of Antimony, with a little Sulphide of Antimony. From the Stockyard Reef, Whroo, in the Waranga District. The reef varies in thickness from a few inches to 15 inches; it is very irregular in its width, the antimony occurring in bunches. The reef was worked for gold in its upper part, and it yielded 1 oz. of gold to the ton.

- 839 Sulphide, with Oxide of Antimony. From the Outward-bound Reef, at a depth of 100 feet, Merton Diggings.
- 840 Sulphide of Antimony. From a lode in the Costerfield Antimony Mine, which is about 2 feet in thickness. The ore from this mine yields about forty-five per cent of crude metallic antimony. The yield of gold from the lode defrays the whole of the working expenses of the mine.
- 841 Galena and Pyrites. From the Fiddler's Creek Reef, which is situated at the point of a spur of the Pyrenees. The reef is from 3 feet to 3 feet 6 inches in width, and is well defined. Its strike is about N. 35° W., and it dips S.W. at an angle of 63°. The upper part of this lode was of the ordinary character of the auriferous quartz-reefs of the colony. At about 100 feet in depth on the underlie, galena associated with iron pyrites was met with, and it filled the entire width of the lode which had been occupied by auriferous quartz. An analysis made of this ore was as follows :
- | | | | | | |
|--------------------------------------|-----|-----|-----|-----|-------|
| Lead | ... | ... | ... | ... | 20·20 |
| Iron | ... | ... | ... | ... | 30·10 |
| Zinc | ... | ... | ... | ... | 3·25 |
| Copper | ... | ... | ... | ... | 0·95 |
| Sulphur | .. | ... | ... | ... | 41·00 |
| Silica and traces of gold and silver | | | | ... | 4·50 |
- 100·00 per cent.
- The gold amounts to 3 ozs. in one ton of 20 cwt.
The silver amounts to 4 ozs. 15 dwts. in one ton of 20 cwt.
- 842 Galena. From a lode in the Buchan Lead and Silver Mine at Buchan.
- 843 Pig Lead. Got from lead ore, raised in the Buchan Lead and Silver Mining Company's Mine, Buchan, Gippsland.
- 844 Manganese Ore, a variety of Wad. From a vein at Clifton Creek, about five miles from Bairnsdale. Some portions of the vein yield 40 per cent. of manganese, whilst other parts are poorer, consisting mostly of an earthy-brown iron ore. From surface indications, the lode is about 3 feet or 3 feet 6 inches in width.
- 845 Brown Iron Ore. It contains iron to the amount of 70 per cent., equivalent to 36·7 per cent. of metallic iron. It occurs in vast quantities in the parish of Dookie, Benalla district.
- 846 Limonite, brown Iron Ore. This ore gave, on assay, iron equal to 50·82 per cent., and silica equal to 5·90 per cent. It contains minute traces of phosphoric acid. The ore was taken from a deposit said to be about 20 or 30 feet in thickness, on the Moorabool River.
- 847 Brown Iron Ore. Low hills and ridges are composed of this iron ore. It varies in thickness from a few inches to 8 feet, and is overlaid by a capping of pea and bean shaped concretions. From the neighbourhood of Ballarat.
- 848 Brown Iron Ore. It yielded, when assayed, 28·40 per cent. of iron ; other assays are reported to have yielded 50 and 68 per cent. of iron. This ore was got from 5 feet beneath the

surface, in a deposit of 3 feet in thickness ; extent unknown it has been proved for 600 feet in one direction. From the Lal Lal Iron Company's Mine, close to the Railway Station, at Lal Lal, near Ballarat.

- 849 Brown Iron Ore. From Porcupine, near Holcombe.
- 850 Brown Iron Ore. From the township of Daylesford.
- 851 Brown Iron Ore. From an extensive deposit situated in the Royal Park, near Melbourne.
- 852 Brown Iron Ore. Got from 2 feet beneath the surface. The deposit has been sunk into 3 feet at this spot ; extent unknown ; surface outcrop very large. This ore is reported to have yielded $62\frac{1}{2}$ per cent. of iron. From the Lal Lal Iron Company's Mine, near Ballarat.
- 853 Micaceous Iron Ore, from Lake Tyers, Gippsland. It contains 60 per cent. of iron. This ore occurs abundantly near the shores of this coast lake.
- 854 Micaceous and Brown Iron Ore. It contains 26.32 per cent. of metallic iron. This ore is said to extend for many miles to the north of Lake Tyers.
- 855 Iron Ore (Argillaceous). An assay of the sample showed it to contain 51.8 per cent. of iron. From near to Avoca, where many thousands of tons are said to exist.
- 856 Bean Iron Ore. It is plentifully distributed over the surface near to and in the bed of the Merri Creek, near Melbourne.
- 857 Pig Iron. From the Lal Lal Iron Company's Mine, near Ballarat. [See No. 848.]
- 858 Coal. From the Western Port Coal Mining Company's pit, Western Port. The seam varies in thickness from 20 inches to 31 inches.
- 859 Coal. From a seam newly discovered, distant 23 miles from the Moe, South Gippsland. The seam is about 10 inches in thickness.
- 860 Brown Coal (Lignite). From the Victoria Brown Coal Company's Mine, at Lal Lal. A shaft has been sunk in this mine to a depth of 200 feet, chiefly through brown coal and kaolin clay. The brown coal first bed or layer commences at 60 feet below the surface and continues down to 188 feet, proving the first bed to be 128 feet in thickness. Beneath this bed there is 5 feet of clay, and then a second bed of brown coal 8 feet in thickness. There is another seam below, but it is not yet prospected. This sample is from the first bed at 100 feet from the surface, or 40 feet below the top of the seam. The following are results of analyses of lignite from this deposit:—

	I.	II.	III.	IV.	V.
Fixed Carbon ...	29.3	27.9	26.7	38.5	39.0
Volatile Matter ...	20.7	22.1	23.3	20.0	20.4
Hygroscopic Water	48.7	48.7	48.7	40.0	40.0
Ash ...	1.3	1.3	1.3	1.5	0.6
	100.0	100.0	100.0	100.0	100.0

Samples I., II., and III. consisted of brownish-black, earthy brown coal. Samples IV. and V. consisted of the woody variety lignite.

861 Lignite Shale. Upon analysis, it gave:—

Water	...	...	...	...	...	2·05
Fixed Carbon	...	...	...	...	...	27·55
Volatile Matter...	...	...	...	...	...	21·00
Ash	...	...	...	...	...	49·40
						<hr/> 100·00

Upon distillation this shale gives a good illuminating oil. It was got from a considerable deposit at Rintoul's, or Tyers Creek, about six miles north of Traralgon, Gippsland.

862 Lignite. It is black and sectile; the freshly-cut surface has a waxy lustre; when heated, it gives off water, and then a gas, which burns with a yellow flame. An analysis gives in 100 parts:—

Water	...	...	...	...	...	27·72
Volatile Matter...	...	...	...	...	...	15·53
Carbon	...	...	...	...	...	7·08
Ash	...	...	...	...	...	49·67
						<hr/> 100·00

It was got from a well near Smeaton. The deposit was struck at a few feet from the surface, and has been sunk in 15 feet without passing through the deposit.

863 Black Lignite. From McKirley's Creek, a tributary of the La Trobe River. The following results were obtained from an analysis of this lignite:—

Water	...	...	...	...	...	22·6
Volatile Hydro-carbons	...	...	...	...	...	38·3
Fixed Carbon	...	...	...	...	...	26·2
Ash	...	...	...	...	...	12·9
						<hr/> 100·0

The two seams of this place of economic value are respectively, 1 foot 7 inches and 4 feet 4 inches in thickness, and they crop out on the surface close to the creek.

864 Limestone. From quarries at Mount Camel.

865 Limestone (Sienna Marble). Found in nodular masses up to several tons in weight in a tertiary deposit at Geelong.

866 Limestone. From a tertiary deposit in low islands in Corio Bay.

867 Magnesite (Carbonate of Magnesia). From Heathcote, where it occurs in quantity in the tertiary clays.

868 Slate Flag. From Wilson and Corben's Quarries, Barker's Creek, Castlemaine. Depth at which the present workings are situated, 170 feet below the surface. The slate, however, runs deeper, and the extent of it appears to be unlimited. The slate is extensively used for flagging, hearthstones, shelving, steps, sills, balconettes, landings, baths, Brewers' coolers, salt-ing troughs, wine vats, billiard tables, etc.

869 Infusorial Earth. A quantitative examination of it gave the following results:—

Silica	...	...	...	...	...	83.88
Alumina (Trace of Iron)	...	...	...	...	...	7.41
Lime	...	...	...	...	...	1.24
Magnesia	...	...	...	...	...	0.75
Water	...	...	...	...	...	6.23

99.51

From the Parish of Amherst, where it occurs in a bed 4 feet in thickness, and from 2 to 16 feet below the surface, and it is said to extend over a considerable area.

FOSSIL FRUIT.

- 870 *Spondylostrobus Smythii*. Found in auriferous drift of the older pliocene formation on Smythe's Creek, Haddon goldfield, at a depth of about 150 feet.
- 871 *Phymatocaryon Mackayi*. Found at the same depth and place as the above.
- 872 *Trematocaryon McLellani*. Discovered in auriferous drift of the older pliocene formation, Haddon goldfield, at Nintingbool, about 150 feet below the surface.
- 873 *Plesiocapparis prisca*. Obtained from the Haddon Lead with *Spondylostrobus*, *Phymatocaryon*, &c.
- 874 *Celyphina McCoyi*. From auriferous drift at Haddon, in the older pliocene formation, about 150 feet below the surface.
- 875 *Odontocaryon Macgregori*. Found in the auriferous drifts near Nintingbool, at a depth of about 150 feet.
- 876 *Conchotheca rotundata*. Obtained from the drifts of the older pliocene formation at Nintingbool.
- 877 *Penteune Clarkei*. Found in older pliocene drift at Smythe's Creek, Haddon goldfield.
- 878 *Penteune brachyclinis*. Found with *Penteune Clarkei*.
- 879 *Penteune trachyclinis*. Occurs with the two foregoing.
- 880 *Xylocaryon Lockii*. Obtained from the auriferous drifts of the lower pliocene formation, Nintingbool.

VICTORIAN GEMS AND PRECIOUS STONES.

BY REV. JOHN I. BLEASDALE, D.D., F.G.S., ETC.

THE following notes and observations have been prepared for the Official Catalogue of Victorian Exhibits to be forwarded to Philadelphia, 1876. They deal only with such products of Victorian mines as are used for purposes of personal adornment or works of vertu. The rock collections from the Mining Department will illustrate the geology of this colony so far as known hitherto. I need, then, when writing at present of this section of mineralogy, only to specify the materials commonly found in company with the gems, and mark, as occasion requires, any noteworthy variation in these associated materials.

It is not an easy matter to draw a line between *gems* proper and *precious* stones. I have drawn it between *translucent* and *opaque*, including sard among the translucent.

The precious stones, then, would commence with the jaspers, agates of all kinds, bloodstones, &c. The noble opal, the cat's-eye, some of the chrysoberyl cat's-eyes and a few others, but slightly, if at all, translucent, claim a high place among gems, when cut *en cabochon*.

The collection to which these notes particularly refer was made by myself, in some instances, on the spot, in others, out of parcels of stones sent me by miners, from parts of the country well known to me. During the last twelve years I have paid constant attention to sorting and reporting upon minerals thus sent to me, and now feel pretty confident that but little new in either kind or variety will in future turn up. In the future, however, there is reason to hope that richer and finer specimens will be discovered. The present, though not the finest collection of cabinet specimens that I have heretofore made and distributed, is still enough to show that,—bearing in mind the law of occurrence in nature, millions of small stones to one large one,—as the miner becomes a better collector, and his children more intelligent about these pretty stones, the localities yielding the small ones of such purity of colour, will give up large ones equally perfect.

DIAMONDS.

It was long doubted, by able geologists, whether there was any occurrence in Victoria of rock formations that would yield diamonds; and even after discoveries of them had been made, doubts continued to be expressed about the truthfulness of the reports. For several years past the original discoveries have received confirmation by the undoubted subsequent unearthing of this interesting gem. But hitherto the only locality which has certainly yielded them is near Beechworth. There they occur along with tin-sand and titaniferous iron ore, close by, if not actually, in decomposed granite; that is to say in rubbish, of which felspar, mica, quartz, and iron form no inconsiderable proportion.

Lying below the present granitic rocks of Beechworth, and stretching for several miles, sometimes near the surface, and seldom 200 feet below it, is a gravelly formation, consisting of the materials usually found in what, in Brazil, is called “Cascalho” and “Itacolumite” of the coarser kind. This may be observed quite commonly on the spoil heaps of the gold diggers. No diamonds have hitherto, however, been found in precisely this formation; but their allies, the pale blue topaz, many shades of corundum, both crystallized and amorphous, angular and water-worn, yellow and white pebbles of crystalline quartz, frequently of large size, zircons, &c., are quite common.

The largest diamond yet found in Victoria did not exceed four carats in weight, but was a fine stone.

The tubes marked 1, 2, 3, and 4 contain complete samples of the sand, mostly corundum of some kind, in which the diamond has been found in Victoria, and rather abundantly at Mudgee, in the sister colony of New South Wales. Here it may be remarked, that the ruby occurs in small crystals commonly, which is not the case so far as we know, hitherto, in Victoria.

CORUNDUM,

The "sapphire series," as it is called. The pure alumina crystals form a large and interesting series in Victoria, since every known variety has been discovered here, and verified by myself—some either altogether new, or extremely rare.

Naturally, on account of its beauty, its comparatively common occurrence only in Ara, Pegu, and other parts of Eastern India, and its high price, the ruby stands foremost among the alumina crystals. In two places only, as yet, have clear transparent crystals been found in Victoria, both places—William Wallace Creek, to the east, and Coimaidai, to the west—being each about 45 miles from Melbourne, and their geological features nearly identical, viz., very deep, waterworn gullies, on the edge of the overlap of the older basalt, upon granite and granitic formations.

No. 5 contains specimens found by myself.

The amorphous red corundum in rolled pieces is found in several places, but most abundantly and of the largest size at and near Beechworth. It is extremely hard, and takes a fine polish, but has not been used for any ornamental purpose. George Milner Stephen, an experienced mineralogist, supposed it to be a new species, and named it Barklyite, after our late Governor, Sir Henry Barkly. Specimens may be seen in No. 6.

BLUE SAPPHIRE.

The next best known and, generally speaking, most highly prized members of the alumina crystals is the blue sapphire. Most of the samples of transparent stones that have come under my observation have been far too deep in colour—too dark. I feel sure this has arisen from the ignorance of the diggers who collected them. Being in the rough state, both transparent and of a very deep indigo-blue, they selected them on that account, as the only ones worth keeping, not knowing that every coloured gem always becomes of a deeper colour by cutting and polishing. Most of those I have seen, when finished by the lapidary, have appeared perfectly black! Occasionally I have seen small ones without fault. No doubt, many fine ones have been thrown away as worthless.

ORIENTAL EMERALD (THE GREEN SAPPHIRE).

The well-known jeweller and dealer in gems, Mr. Harry Emanuel, of Bond-street, London, in a work on gem minerals, published about ten years ago, says of this variety of crystallised and transparent corundum, that "it is the rarest of all gems, and is scarcely ever seen. In the whole course of my experience I have only met with one specimen" (page 105). I have found, myself, about a dozen, and have seen a few in a collection made by an able and industrious mineralogist — Mr. George Milner Stephen. Among those found by myself are two now wrought: one in my own possession, of about four carats, without a fault of any kind, and pronounced by mineralogists, such as Professor Maskeleyne, Curator of Mineral Collections, British Museum, to be *unique*. The other is an equally large and fine gem, though hardly cut to the best advantage. These stones, which I have found in collections made

by diggers, have come from districts widely apart—as, from Donnelly's Creek, Gippsland; Jim Crow Ranges, and Comaidai, near Mount Blackwood. The appearance of those I have examined shows but little of their crystalline structure, and would be generally described as rolled or water-worn pieces. Were they only properly sought for, were it only in washing for gold, they would soon become of real value in jewellery.

CORUNDUM, OR ALUMINA SERIES (CONTINUED),

To all of which varieties, except sapphire and ruby, of whatever colour they may be, the term "Oriental" is applied; e.g., pale bluish-green is called oriental aqua-marine; the yellow variety, oriental topaz, &c.; purple, oriental amethyst.

Transparent sapphires from Beechworth, Donnelly's Creek, and Mount Blackwood.

Opaque varieties from the above places, and also from Glen Lyon.

Star sapphires from the Ovens River, Beechworth, and Jim Crow Ranges, near Daylesford.

One absolutely perfect and rare crystal (translucent) from Comaidai, having the pyramids at both ends complete, with the blue colouring matter collected in a band at the bases of the pyramids, the rest being yellow.

Rubies from William Wallace Creek, and also found by me in a miscellaneous collection of residues, found by miners when panning off the gold, at Comaidai Gully and Creek.

Oriental aqua-marines from W. Wallace, where alone they have, as yet, been found in Victoria; one cut for a ring stone; many in the form of plates and splinters.

Star sapphires in the rough.

SPINELS.

Small, red, transparent, good crystals, from Woolshed Creek, near Beechworth.

TOPAZES.

White, blue, and slightly pink, from the Ovens River and Woolshed Creek; also from Dunolly, Tarrengower, Mount Blackwood, and the vicinity of Mansfield. This is a complete and typical series of all known forms into which the primitive crystal has been modified. Two fine ones are cut. No brown or yellow topaz has yet been found in Victoria, nor, I believe, in Australia.

BERYLS.

Some said to have been found in gneissoid lumps, in a limestone rock near Cape Bridgewater.

OPALS.

The two specimens of Noble Fire Opal were found by a miner, near Beechworth, and given by him to myself. I have seen the harlequin opal there of good size, over an inch in length, and of corresponding thickness.

GARNETS.

These occur, often of fair size, where the diggers are mining in country derived from granite. In this colony they are all of the almandine character. The reddish-brown and true red occur in South Australia, but have not yet been made known here.

TOURMALINES.

I found one or two long crystals only.

The Quartz Series.—Rock Crystals, Amethysts, Cairngorms, Smoky Quartz, Agates, Jaspers, Chrysoprase, &c.

Onyx stones and the whole transition series through sardonyx to translucent, and transparent, rolled, and sub-angular pieces.

Several phials containing specimens of all kinds of materials, heavier than common clay, found associated with each of the above classes.

ACADIA CATHERINE GOLD MINING COMPANY, Sandhurst.

881 Specimens of Golden Stone from the Acadia Catherine Mine.

BLEASDALE, REV. J. I., D.D., St. Patrick's College, Melbourne.

Collection of Gems and Precious Stones, consisting of Diamonds, Blue Sapphires, Oriental Emeralds (the green sapphire), Rubies, Aqua-marines, Topazes, Spinel, Beryls, Opals, Garnets, Tourmalines, &c., &c., collected by exhibitor:—

- 882 Sand, &c., in which Diamonds have been found in Victoria and New South Wales. (Mudgee.)
- 883 Rubies, from William Wallace Creek, 40 miles from Melbourne.
- 884 Barklyite, Opaque Ruby. From Beechworth.
- 885 Rough specimens of Oriental Emerald. (Green sapphire.)
- 886 Oriental Aqua-Marine. (Wm. Wallace.)
- 887 Oriental Aqua-Marine; one cut. (Wm. Wallace.)
- 888 Oriental Topaz. (Wm. Wallace.)
- 889 Gem materials, as they occur. (Wm. Wallace.)
- 890 Commonly found accompanying gems on Victorian goldfields.
- 891 Mixed Gem Stones, as they occur at Mount Blackwood.
- 892 Black Sand, Titaniferous Iron, found with gems at Woodshed Creek.
- 893 Small Red Spinel, from Beechworth. (Black ones common.)
- 894 Almandine Garnets; two cut. Various goldfields.
- 895 Rough Corundum, with some specimens of Star Sapphire.
- 896 Forms under which "Asteria" Star Sapphire occurs in Victoria.
- 897 Wax and Fire Opal. Ovens River.
- 898 Cinnamon Stones (Essonite). From near Mansfield.

- 899 Cinnamon Stones (Essonite). From Reid's Creek.
- 900 Rough Zircons. From Mansfield.
- 901 Rough Zircon Sand. From Tubba-Rubba Creek.
- 902 Rough Zircon Sand, as found near gneissoid formations.
- 903 Other Zircons, often naturally white—near newer basalt.
- 904 Small Garnets, in clear quartz, &c.
- 905 One fine Almandine Garnet. Found near Melbourne.
- 906 Specimens of Brazilian Topaz. Not found yet in Australia.
- 907 Topazes—white; two cut. Tarrengower.
- 908 A complete series of Crystals, showing all the conditions in which they are found—from perfect forms to mere rolled and water-worn pieces. The best crystals come from Mount Greenock, Tarrengower, where the blue is sometimes found of great size and beauty. The rest have been selected from our other mines. There is no number attached to this collection in the box.
- 909 Cairngorms, cut. Woolshed Creek.
- 910 Chrysoprase (cut in Melbourne). Stringer's Creek.
- 911 Uncertain whether Quartz or Topaz. Not uncommon on the goldfields.
- 912 Probably Volcanic Glass; polishes well. Old gravel drifts.
- 913 Cornelians; two wrought. Woolshed Creek.
- 914 Substances associated with Jasper, Agate, Chrysoprase, &c.
- 915 Red and Grey Jasper. Gippsland mines generally.
- 916 Quartz, as it commonly occurs at Ballarat.
- 917 Matters for study at the School of Mines (to sort and classify.)
- 918 Topazes from Flinders Island (for comparison).
- 919 The rest comprises the whole Quartz series, from Jaspers and Agates, at one extreme, to Rock Crystal, Cairngorm, and Amethyst, at the other.
- 920 Beryl in Granite. Probably from near Omeo.
- 921 One Wrought Amethyst. From Omeo.
- 922 One Wrought Hyacinth. Donnelly's Creek.
- 923 One Hair-brown Specimen (Star Sapphire). Stringer's Creek.
- 924 Three Wrought Amethysts. Ovens River.
- 925 One specimen Hair-brown Star Sapphire, polished.
- 926 Sphærosiderite. From Sunbury.
- 927 Pseudo-Crystal. From Beechworth.*
- 928 Clay in which the Pseudo-Crystals occur.*
- 929 Quartz Crystal. From Tarnagulla.
- 930 Topaz. From near Berwick.
- 931 Agates (Cornelian). From near Berwick.
- 932 Green Pebbles. Tasmania.
- 933 Agates (Chalcedony). From Spring Bay, Tasmania.
- 934 Pebbles, one green and two mottled. Tasmania.

* NOTE.—Nos. 927 and 928, Pseudo-Crystals, from Beechworth, and Material (Clay?), in which they occur, require further elucidation. They are here called sometimes Pseudo-morphs, and at others Pseudo-Crystals; but the real question for mineralogists is, are they either one or the other?

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

Fac-similes of Nuggets found in Victoria, viz. :—

- 935 Beauty, found at Bendigo, weight 242 oz.
- 936 Platypus, found at Bendigo, weight 377 oz. 6 dwt.
- 937 Viscount Canterbury, found at Berlin, weight 1105 oz.
- 938 Schlemm, found at Dunolly, weight 478 oz.
- 939 Creswick, weight 24 oz. 3 dwt.
- 940 Kum Toon, found at Berlin, weight 718 oz. 5 dwt.
- 941 Viscountess Canterbury, found at Berlin, weight 884 oz. 10 dwt.
- 942 Crescent, found at Berlin, weight 176 oz. 8 dwt.
- 943 Creswick, weight 32 oz.
- 944 Oldham, found at Turton's Creek, weight 2 oz.
- 945 Oldham, found at Turton's Creek, weight 36 oz. 6 dwt.
- 946 Spondulix, found at Jordon's, weight 130 oz.
- 947 Alma 1, found at Maryborough, weight 125 oz.
- 948 Creswick, weight 46 oz. 15 dwt.
- 949 Creswick.
- 950 Found at Buninyong, weight 58 oz. 5 dwt.
- 951 Howitt's, found at Upper Boggy Creek, weight 29 oz.
- 952 Needful, found at Berlin, weight 246 oz. 16 dwt.
- 953 Alma 2, found at Maryborough, weight 150 oz.
- 954 Eldorado, found at Smythesdale, weight 170 oz.
- 955 Lothair, found at Clunes, weight 77 oz.
- 956 Found at Sandhurst, weight 46 oz.
- 957 Found at Creswick, weight 53 oz.
- 958 Sandhurst.
- 959 Welcome, found at Ballarat, weight 2159 oz.

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- 960 Black Oxide of Maganese with Limonite.
 - 961 Black Oxide of Limonite.
 - 962 Antimony Ore from the Costerfield Gold and Antimony Mining Company.
 - 963 Titaniferous Wash-dirt.
 - 964 Lead Ore from the Murindal Mining Company.
 - 965 Model of the "Welcome" Nugget.
 - 966 Asbestos.
 - 967 Iron Ore Magnetite.
 - 968 Iron Ore Crystallised Hematite.
 - 969 Iron Ore Brown Hematite.
 - 970 Iron Ore Magnetic Oxide.
 - 971 Tin from the Koetung Creek.
 - 972 Mineralogical and Geological Specimens from the Victorian Mining Department.
 - 973 Ingot of Lead.
 - 974 Quartz from the Cross Reef Gold Mining Company.
 - 975 Quartz from the New Chum and Belle View Gold Mining Company.
 - 976 Quartz specimens from the New North Clunes Gold Mining Company.

- 977 Block of Auriferous Quartz from the Carlisle North Garden Gully Gold Mining Company.
- 978 Block of Quartz from the Extended Hustler's Quartz Mining Company.
- 979 Block of Auriferous Quartz from the Great Extended Hustler's Gold Mining Company.
- 980 Block of Quartz from the Black Hill Gold Mining Company.
- 981 Auriferous Quartz from the Golden Fleece Gold Mining Company.
- 982 Specimens of Gold-bearing Quartz.

COSTERFIELD GOLD & ANTIMONY MINING COMPANY,
Office, 52 Elizabeth-street, Melbourne.

- 983 Antimony Ore.

HANCKAR, J. H. H., 52 Bourke-street east, Melbourne.

- 984 Block of Nickel Ore from the Boa Kaine Mine, New Caledonia.

M'GIE, JAMES, & CO., Melbourne.

- 985 Nickel Ore.

SHENANDOAH GOLD MINING COMPANY, Sandhurst.

- 986 Gold-bearing Quartz from stope at the 390 feet level. Reef, 7 feet wide. This specimen was in one block, and split up to disclose gold.

SMYTH, R. BROUGH, Department of Mines, Melbourne.

- 987 Sketch of a New Geological Map of Victoria.
- 988 Geological Sketch Map of the Cape Otway District, Victoria.
- 989 Sections to accompany Geological Sketch Map of the Cape Otway District.
- 990 Geological Map of the Ballarat Goldfield.
- 991 Sections to accompany Geological Map of the Ballarat Goldfield.
- 992 Geological Map of the Sandhurst Goldfield.
- 993 Geological Sketch Map of part of the Mitchell River Division of the Gippsland Mining District.
- 994 Section from Mount Alfred to Mount Taylor Creek, and Section across Lower Boggy Creek and Mount Lookout to the Mitchell River Backwater, Gippsland.
- 995 Geological Sketch Map of the Parish of Beechworth.
- 996 Map of Victoria—Distribution of Forest Trees.
- 997 Lithographic Plates of Fossil Fruits.
- 998 *Spondylostrobus Smythii*.
- 999 *Phymatocaryon Mackayi*.
- 1000 *Trematocaryon McLellani*.
- 1001 *Rhytidotheca Lynchii* and *Plesiocapparis prisca*.
- 1002 *Celyphina McCoyi*.
- 1003 *Rhytidotheca pteroclinis*—*Odontocaryon Macgregorii* and *Conchotheca rotundata*.

- 1004 *Penteune Clarkei*.
 - 1005 *Penteune brachyclinis* and *Pentenne trachyclinis*.
 - 1006 *Dieune pluriosoluta* and *Platycoila Sullivanii*.
 - 1007 *Phymatocaryon angulare* and *Conchotheca turgida*.
 - 1008 *Xylocaryon Lockii*.
 - 1009 Victoria—Mines and Minerals—Reports, 1865-74—containing Mineral Statistics of Victoria for the years 1865 to 1874 inclusive; Report of the Chief Inspector of Mines for the year 1874; and Report of Board—Western Port Coalfields.
 - 1010 Goldfields and Mineral Districts of Victoria.
 - 1011 Palæontology of Victoria—Organic Remains and Vegetable Fossils, containing decades 1 and 2.
 - 1012 Geological Survey of Victoria—Progress Reports, 1872. Nos. 1 and 2.
-

CLASS 101.—Mineral combustibles. Coal, anthracite, semi-bituminous and bituminous, coal waste and pressed coal; albertite, asphalt, and asphaltic limestone; bitumen, mineral tar, crude petroleum.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

- 1013 Coal.

MINING DEPARTMENT OF VICTORIA, Melbourne.

- 1014 Coal.
-

CLASS 102.—Building stones, marble slates, &c. Rough, hewn, sawed, or polished, for buildings, bridges, walls, or other constructions, or for interior decoration, or for furniture.

MARBLE—white, black, or coloured—used in building decoration, statuary, monuments, or furniture, in blocks or slabs not manufactured.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

- 1015 Sawn Slate.
- 1016 Block of Granite.
- 1017 Specimens of Polished Marble.

MANSFIELD SHIRE COUNCIL, Mansfield.

- 1018 Slabs of Polished Marble.
 - 1019 Hewn Sandstone.
-

CLASS 103.—Lime, cement, and hydraulic cement, raw and burned, accompanied by specimens of the crude rock, or material used, also artificial stone, concrete, beton.

Specimens of lime mortar and mixtures, with illustrations of the process of mixing, &c. Hydraulic and other cement.

Beton mixtures and results, with illustrations of the processes.
 Artificial stone for building purposes, building blocks, cornices, &c.
 Artificial stone mixtures, for pavements, walls, or ceilings.
 Plasters, mastics, &c.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
 EXHIBITION, Melbourne.

1020 Limestone from Major Plains.

CLASS 104.—Clays, kaolin, silex, and other materials for the manufacture of porcelaine, faience, and of glass, bricks, terra-cotta, and tiles, and fire-brick. Refractory stone for lining furnaces, sandstone, steatite, &c., and refractory furnace materials.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
 EXHIBITION, Melbourne.

1021 Black Clay, Hoffman's Patent.

1022 Clay and Sand.

1023 Kaolin Clay.

CLASS 106.—Lithographic stones, hones, whetstones, grindstones, grinding and polishing materials, sand quartz, garnet, crude topaz, diamond, corundum, emery in the rock and pulverised, and in assorted sizes and grades.

ARTHUR & DOGHERTY, New Zealand.

1024 Sample of Lithographic Stone.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
 EXHIBITION, Melbourne.

1025 Sharpening Stones from Wahgunyah.

LEWIS & WHITTY, Charles-street, Fitzroy.

1026 Knife Polish.

CLASS 107.—Mineral waters, artesian well water, natural brines, saline and alkaline efflorescences and solutions. Mineral fertilizing substances, gypsum, phosphate of lime, marls, shells, coprolites, &c. not manufactured.

HATTERSLEY, J., Yackandandah.

1027 Ærated Waters.

LYON, GEORGE, Spring Creek, Beechworth.

1028 Lemonade.

1029 Sodawater.

1030 Ginger Ale.

ROWLANDS & LEWIS, Ballarat and Melbourne.

- 1031 Tonic Water.
 - 1032 Potass Water.
 - 1033 Soda Water.
 - 1034 Lithia Water.
 - 1035 Seltzer Water.
 - 1036 Ginger Ale.
-

METALLURGICAL PRODUCTS.

CLASS 113.—Lead, zinc, antimony, and other metals, the result of extractive processes.

BRIGHT BROTHERS & CO., Little Flinders-street west, Melbourne.

- 1037 Star Antimony in ingots.

COSTERFIELD GOLD & ANTIMONY MINING COMPANY,
Office, 52 Elizabeth-street, Melbourne.

- 1038 Sulphide of Antimony.
- 1039 Refined Sulphide of Antimony.
- 1040 Crude Antimony of Commerce.
- 1041 Oxide of Antimony.
- 1042 Pure Regulus of Antimony, reduced from the oxide.

HODGSON, RICHARD, Noon-street, Collingwood.

- 1043 Star Antimony.
 - 1044 Pigs of Lead.
 - 1045 Blocks of Tin, all smelted in the colony.
-

DEPARTMENT II.—MANUFACTURES.

CHEMICALS.

CLASS 200.—Chemicals, pharmaceutical preparations, and fertilizing compounds.

Mineral acids, and the methods of manufacture. Sulphuric, nitric, and hydrochloric acids.

The common commercial alkalies, potash, soda, and ammonia, with their carbonates.

Salt, and its production. Salt from deposits—native salt. Salt by solar evaporation from sea-water. Salt by evaporation from water of saline springs or wells. Rock salt. Ground and table salt.

Bleaching powders and chloride of lime.

Fertilizing compounds made from bones, guano, fish, and other organic sources.

Fertilizing compounds made from mineral phosphates, potash, salts, and other mineral sources. Stassfurth compounds.

Yeast powders, baking powders.

THE following paper, which describes the *Eucalyptus* of Australia, was read before the Royal Society of Victoria, 10th August, 1874, by Mr. Bosisto, M.P., one of the Commissioners :—

In many places on the continent of Europe and elsewhere, experiments have been made to acclimatise our *eucalypti*, more especially the "*globulus*," or blue-gum species.

The rapidity of its growth, its pretty ovate, and afterwards lanceolate leaf, its early maturity, together with its power to absorb considerable moisture, and to permeate the air with its peculiar odour, led to the belief that this tree, attractive in itself, exerts a beneficial influence upon malarious districts. But this species, if considered apart from its *con-geners*, does not supply sufficient information so as to arrive at anything like a satisfactory answer.

In the consideration of the question, is the *eucalyptus* a fever-destroying tree? or, in other words, does it tend to lessen malaria or to destroy miasmatic poison? we propose to regard the whole of the *eucalypt* vegetation.

If we journey from Melbourne or from other centres of population into any part of Australia, or diverge to any point of the compass, we immediately observe the *eucalyptus*, which is but seldom absent until we again enter some city or town; in fact, four-fifths of Australian vegetation consists of the *eucalyptus*.

In the consideration, therefore, of its climatic influence or of its health-producing power over that of all other vegetation existing in other countries, we are able more efficiently than elsewhere to deal with the subject.

Physiologists explain the part taken by the plants in general to renovate the atmosphere and to supply to man and all other living creatures a vitalising air, and sanitary reformers have expatiated on the evils resulting from decayed vegetation under all circumstances; but as regards the destruction of malaria by the growth of certain trees, although this means has been recommended from early times, the *rationale* has been left an open question.

Some trees and plants have the reputation of evolving malaria, and in the countries where they grow the inhabitants avoid camping under or about them; in other instances, the dewdrops of the morning from off some plants have been known to irritate the skin in appearance like fever spots, similar to what I have seen produced from our *figus macrophylla*.

Such instances are traceable to some substance existing in the plant, and have nothing to do with malaria.

Whatever may be the theory adopted as to the causes of zymotic fevers, whether it be "*Liebig's Albuminoid*," or "*Pasteur's Animalcular*," they greatly abound in many countries.

Australia on the whole may be said to be pretty free from virulent endemic or miasmatic fevers, and the latter may be said to exist only as the *eucalyptus* recedes.

The physical geography of Australia does not differ in its general outline from that of other countries. We have mountains and valleys, high ranges and extensive plains, rivers and creeks, and according to

Mr. Selwyn,* "in general structure, character, and composition, in geological sequence, and in physical and palæontological relations, the rock formations in Victoria are in all respects analogous to those of other regions."

But in the *eucalypti* we have a vegetation absolutely Australian, with the exception of its existing in the neighbouring island of Tasmania.

If, therefore, we possess in a very high degree an immunity from fever maladies, can it be traced in any way to this genus of the myrtaceous order?

Baron von Mueller describes over 130 species of this genus as existing in Australia. To an ordinary observer many species are extremely difficult of discrimination; some form together forests of great extent, both on high and low table land, others dense desert scrub, and some are so distributed over areas as to give a park-like appearance.

For the purpose in hand, I intend to refer—first, in general terms to the physical and chemical properties of the *eucalypti* as a whole, and specially to those species which may properly be said to be the representatives of this class of vegetation.

The physical properties of all *eucalypts* are—that they cast their bark; that the leaves are evergreen and have translucent cells, in some species visible to the naked eye; that the petiole is half twisted, so that the plane of the leaf is parallel to the axis of the tree, thereby allowing free action to the light and heat of the sun *on both sides*; also the roots are dispersive and drain water largely from the soil.

The chemical contents of a *eucalyptus* tree are neither poisonous nor virulent. Besides possessing those invariably met with as general constituents of ligneous vegetation, there is a *tannate gum resin*, a *volatile acid* and a *volatile oil* peculiarly of *eucalyptic* origin. The first two are to be found in most parts of the tree, but the latter only in the leaves. Now it is in these three bodies I think that we have the key to the question before us, and I conjecture that apart from these no trace can be found of the power of the *eucalyptus* to oxygenate the air beyond that which is possessed by other kinds of vegetation. If the principles of these bodies are retained in the tree until set free by the art of man, then further investigation is useless; but if one or more are given up freely by the natural forces of the tree, or by the aid of light, heat, or electricity as existing in the atmosphere, or by some or all of these forces in combination, then there is every reason to pursue our inquiries.

The question then arises, have we any proof that these volatile bodies are set free in the air by the forces of the plant in union with atmospheric agencies? if we have,

When does it take place?

What is the quantity?

What is the probable sanitary effect?

Before taking up this question with the above queries, I think it but right (although known to most of the members of this society) to men-

tion that my operations on the *eucalyptus*, both as to its solid and volatile contents, for technical and medical purposes, have extended over many years, and that they have been conducted on the living plant in its forests and in the desert scrub during all seasons of the year, and that the apparatus employed operated on four tons of material daily.

The representative or type species to which I have referred will elucidate the whole question. They are the following eight species:—

1. Viminalis, or manna gum.
2. Odorata.
3. Rostrata, or red gum.
4. Obliqua, or stringy bark.
5. Sideroxylon, or iron bark.
6. Globulus, or blue gum.
7. Oleosa, or mallee.
8. Amygdalina, or peppermint.

The first two—*viminalis* and *odorata*—represent those species of the *eucalypti* which yield a small percentage of volatile oil.

The four following—the red gum, the stringy bark, the blue gum, and the iron bark—represent those species which gradually increase in percentage of oil until it attains to a fair medium standard; and the last two—the mallee and the peppermint—are those which represent the maximum. The following is the illustration:—

Odorata yields 7 fluid ounces from 1000 lbs. weight of fresh-gathered leaves attached to very small branchlets.

Viminalis	yields	the same		
Rostrata	„	15 ounces.		
Obliqua	„	80	„	or 4 pints.
Globulus	„	120	„	„ 6 „
Sideroxylon	„	160	„	„ 8 „
Oleosa	„	200	„	„ 10 „
Amygdalina	„	500	„	„ 25 „

No *eucalypts* exceed the *amygdalina*, and no vegetation contains so much volatile oil in the leaves as is found in most of the species just named. The eight species I have just given, not only represent the oil yield from the minimum to the maximum, but also the volatile acid and the tannate gum resin, as well as locality, from mountain to desert.

First, then, concerning the volatile oil. If we break up a leaf of any of the *eucalypti* during any part of the year, its usual aroma is present, and the oil cells appear the same in condition, but when submitted to a practical test the quantity is found to vary. Soil or locality does not appreciably affect the quantity obtained from a species when operated upon during the same season of the year.

The range of those species represented in the *viminalis* and *odorata* as yielding oil sparingly is limited in comparison with those producing larger supplies; these have a wide range.

Gum trees when in full vigour have a large amount of leaf surface, and it is necessary to note that the variableness of the supply of oil does not arise from any diminution of leaves on the branchlets during any part of the year. The oil variation throughout some years is under 20 per centum, and in others it varies very considerably, as we shall see presently. Then again the variation does not follow in a cycle of time from its maximum to its minimum, but is intermittent. To account

for these peculiarities with exactness, is a task I shall not attempt; still I may point out that the root habit of a species, the temperature of the ground, and that of the air, have much to do with it.

For example, the *eucalyptus amygdalina* is a tree varying in size from that of an ordinary willow to that of the giants of the forest, some being over 350 feet in height; it occupies chiefly the higher portions of undulating forest land, and the sides of the ranges, and does not extend over 100 miles inland; the ground where it grows retains a little moisture throughout the summer months, September to April, the roots run chiefly lateral, and are seldom lower than three feet from the surface; they are surrounded with a soil evenly cool, but the temperature of the air has its usual summer range; during these months the supply of oil from week to week is very even, but as the cooler or winter months approach, the ground becoming moist from rain, and the temperature of the air lower, the supply of oil falls off.

Again, the mallee scrub is the opposite of all this. Properly this scrub consists of three species—the *oleosa*, the *dumosa*, and the *socialis*, but I have brought them under consideration as one, the *oleosa*. They are the dwarfs of the *eucalypti*, but seldom growing higher than 25 feet, and are more like saplings than trees; they occupy a flat, dry, hungry country, with but little growth of grass under them, chiefly dwarf heath bushes; there is little rain, but when it comes it is generally in torrents; the soil is a reddish sand, in combination with salt clay; this during the long droughts becomes exceeding hard, so much so that a pickaxe is required to turn the soil. The roots run somewhat in a horizontal direction, and the rootlets spread out traveling downward; and as the salt water is to be obtained always at from 25 to 40 feet, they are found resting on the moisture of the salt soil, just above the sandstone rock, which generally commences about 12 feet above the salt spring. The temperature of the surface ground, and also that of the air, is very high throughout the summer. The leaves supply a greater amount of oil during the winter, or rainy months, than during the hot, or summer months.

These two examples of opposite conditions at one and at the same time present themselves to my mind thus—

That too much rain *out* of season renders the *amygdalina* and the other sea-ward species *poor* in volatile oil; and that the early and latter winter storms of the interior, place the desert species in the same oil condition as those of the *amygdalina* and its allies. Hence the mallee supplies an abundance of oil during the moist season, and the coast species during the summer.

We have, therefore, a *eucalyptus* vegetation charged to its utmost from September to April around all our populated districts, and we have another in the desert species charged in like manner from May to October. In other words, as midwinter approaches, the coast species are increasing in volatile products and the others are decreasing.

In proof of this I give the following: In December and January the desert *eucalypti* are sending forth at the top of their thick foliated branches, new sprigs filled with new leaf development, and notwithstanding their small and delicate structure, they are full of oil cells

with scarce a trace of oil in them; and in a degree a similar impoverished condition exists in the old and matured leaves. (Specimen shown.) This again is the very opposite to the *amygdalina*, the *globulus*, and others, July and August being the months when this vegetation is in the same condition. (Specimens shown.)

These facts to some extent account for the scarcity of oil at the times mentioned, but it is worth recording that the vigour of the *eucalyptus* is greater in some years than others; some years very little new growth takes place in comparison with other years; and that when the *eucalyptus* is less vigorous in growth, the oil-cells are charged more equally throughout the whole year.

But to illustrate this further: In July, 1872, the mallee was in fine oil condition, each two tons of rough cut branches, with their leaves, gave to gallons of oil. The ground was well saturated with water, and the surrounding country had a good overflow from the river Murray and its tributaries. The dry season set in immediately after, and the temperature of the air rose rapidly to summer heat, ranging from 68° to 92°.

In November, the country became greatly parched, and the only fresh water obtainable was that from the Murray. The oil product was reduced to fourteen pints, being a loss of two pints per two tons weight of material.

At the commencement of December, the yield had fallen to twelve pints, and at the close of the year to nine pints, the oil product gradually diminishing to the end of summer—the end of March—when the supply fluctuated from eight to four pints, the dry season still continuing.

The *amygdalina*, in the Dandenong Ranges, 280 miles S.E. of the mallee, and approaching the sea coast, produced in the same winter, month of July, only one-fifth of its full summer supply.

The two preceding years were similar, but did not vary so rapidly. On the other hand, in the year 1861, when my experiments with this mallee vegetation were occasional, it yielded as much volatile oil in December as when it was at its height, in July of 1873; and the coast species kept up a good supply with little change throughout the whole year.

The mallee country, as we shall see presently, plays a very important part in the climatic influences of Australia. But to proceed with the evidence that the *eucalypt* volatile bodies are set free in the air, we will examine the leaf and its surroundings more fully. The suspension of each leaf from the branches, as before stated, is in a line with the axis of the tree; in such cases, “there is no difference in the anatomy of the two sides.*” The stomata are on each side, and the oil cells run right through. The leaves being evergreen, are performing functions necessary to sustain the health and vigour of the tree throughout the year. Light affects both sides alike, and the temperature of the day regulates the exhalation of moisture from each leaf, and, as a light volatile body will ascend with watery vapour at an ordinary temperature, the oil dew exuding from each oil cell by the advancing forces, is so conveyed into the air.

* Lindley, “Elements of Botany,” page 45.

The sense of smell bears ample testimony, when in gum-tree forests, of the presence of its volatile bodies; for there is no mistaking the aroma, as it is different from all others.

The night and morning dews of the mallee country are frequent in spring and summer; this is in part owing to the suspension of water in the air during the hot days from the River Murray and its tributaries, as they pass for a considerable distance through this scrub; but the greater amount of dew moisture is owing to the exhalation of the leaves, for it must be remembered, that although the surface soil is dry and hard, the roots go down to the moist under-soil obtained from the salt water springs. During the severe droughts to which this country is subject, the trunks of these dwarf trees are *full* of moisture, but so poor of sap constituents, that in one of the species in particular, when the trunk is cut close down to the roots, and placed in a bushman's pannikin, a cool and refreshing draught of water is obtained, to the great relief of a weary wanderer in this lone and dreary scrub.

So far our evidence of oil-evaporation may be stated thus: That the desert scrub gums, after a winter of average rainfall, supply the air with a continuous and even quantity of aromatic vapour, and keep up a vigorous vitality throughout the summer, or dry season; and that a short season of rain, and a long dry one, diminish the formation of oil, and so lessen the exhalation. On the other hand, the seaward species increase their quantity after a short winter.

Next concerning the volatile acid. *Eucalyptus* leaves (especially those of some species) when submitted to the process of ordinary distillation by steam or water for volatile oil, throw off a volatile acid which greatly affects the copper head of the still, so much so, that on lifting it off we find the under surface covered with what is like a coat of slate-coloured paint. After the copper head has been in use for some time, this paint-like substance dries into scales having a slate-pearly appearance. If the distillation has been by water, and the mother liquor remaining in the still is subjected to a little evaporation, this acid may be detected in the vapour by litmus paper.

Should the evaporation be carried to further concentration, the acid aroma becomes palpable around the locality of operation, persistent, and very refreshing; in short, there is no expelling this acid out of the gum-resinous extract forming in the pan. The aroma of the acid may be detected in the air along with that of the oil, when travelling in the bush.

The special features of this acid as existing in all *eucalypts* are, that in those species supplying oil most abundantly, the acid is *not so prominent* as it is in those yielding the medium quantities; whilst those species which contain oil sparingly, contain also but little of the acid. In like manner, this applies to the resin bodies, and these facts are worthy of particular note, as they go to show—first, that those species yielding largely of oil are not so abundant either in resin or acid; and that those of medium oil-yield are well charged with both. In proof of this, the *amygdalina*, our largest oil-producing species, during its active period of supplying the volatile oil, does not throw off much resin; but when it begins to lodge in the interstices of

the bark and wood, and exudes outwardly, the oil is diminished in quantity in the leaves.

The *globulus*, or blue gum, yields a continued steady supply of oil and acid throughout the year; but when the tree is extra resiniferous, the acid is abundant, and the oil small in quantity.

The *rostrata*, or red gum, is another illustration. It produces a very small quantity of oil, but the volatile acid is very abundant, so much so that the red gum wood owes its aroma entirely to this acid.

The *sideroxylon*, or iron-bark, are trees of good dimensions, and supply oil abundantly; but the leaf surface on each tree is small in comparison with other species. Here the resin is so abundant that its enormous bark is everywhere studded with gum resin.

All these characteristics, and others of like nature, point to the following conclusion—That the volatile oil is the base of the other products, peculiarly of *eucalyptic* origin; and for the following reasons—that those species which are great in the production of oil, supply it vigorously to the atmosphere, giving but little time for the formation of substances such as resins and acids, requiring the absorption of oxygen by the leaf to form them. On the other hand, those species less vigorous in oil production allow time for the purpose, hence they become well stored with resin and with the acid.

We come now to consider the extent of this vegetation.

First, in Victoria. The whole colony, to quote from Mr. Skene's report to the commissioners of the Exhibition of 1861, consisted of 55,644,000 acres, tabulated as follows:—

Dense mallee scrub	-	-	5,560,000	acres.
Mountainous ranges, densely wooded with gums	-	-	6,225,000	"
Opened timbered country	-	-	38,922,000	"
Leaving for open plains devoid of timber	-	-	4,470,000	"
For morasses, lakes, and lagoons	-	-	402,000	"
And for tea tree scrub, melaleuca			65,000	"

First—the mallee. The area* of 50 square feet of average scrub yields at its maximum one gallon or eight pints of oil. The whole of these dwarf *eucalypts* consequently retain in their leaves at one time, 4,843,872,000 gallons.

Second—Mountain ranges densely wooded with gum, *i.e.*, chiefly consisting of red gum, blue gum, stringy bark, white gum, and iron-bark. The area of 1000 square feet supplies one gallon or eight pints of oil. The whole of this vegetation, therefore, retains in its leaves at its maximum 271,161,000 gallons.

Third—Open timbered country. Taking this as containing all the other exogenæ of Victoria, we may safely assess it as containing one-fourth of the *eucalypti*. Averaging every four acres as supplying one gallon, we have 9,730,500 gallons of oil. In other words, the desert species contains 4,843,872,000 gallons, and the seaward species 280,891,000 gallons.

* The area here given is extremely liberal, as in some parts it gave two gallons.

If we now take into consideration the extent of the mallee country in the territory of New South Wales and South Australia—the exact area I have not at present at hand, but am credibly informed that it is, at the lowest calculation, 20 times the area of ours—we have 96,877,444,000 gallons of oil held at one and the same time in a belt of country massed together, over which the hot winds pass; and considering also that the same condition exists throughout the major part of Australia with the other *eucalypts* as that which exists in Victoria, we cannot arrive at any other conclusion than that the whole atmosphere of Australia is more or less affected by the perpetual exhalation of these volatile bodies.

What then is the probable physical effect? The elements composing the volatile oils from the *eucalypti* are three—O., H., and C.

Dr. J. H. Gladstone, of London, gives the following formula to the *eucalyptus amygdalina*— $C_{10}H_{16}$; to some of the others, the like or a multiple of that; and to *eucalyptus oleosa* (mallee) $C_{10}H_{16}O$.

The sp. grav. of these oils at 60° F. range between 0.881 to 0.923.

Such volatile bodies, when existing in the atmosphere, are so minute and so diffusive, that they may be expressed as the fragrant breath of the tree, requiring thousands of its compound particles to form one minim. Under such a condition they are in a state of preparation for a change in their molecular condition. The researches of Schönbein and others relating to the change the oxygen of the atmosphere undergoes by electricity and by other known oxidizing agents, suggested a similar province for the aroma of plants and flowers; and in an address delivered by Dr. Andrews last December, before the Royal Society of Edinburgh, he states that “volatile oils, like phosphorus, have the power of changing oxygen into ozone while they are slowly oxidizing.”

Unless some such change took place in the air, the aroma of the oils of the *eucalypti* would be always present, and to such an extent as to become quite unpleasant. Ozone, or whatever may be the active substance in the atmosphere, is known to act in a similar manner on iodide of potassium and some other chemicals, and Dr. Day, of Geelong, whose researches on this subject are well known, has demonstrated that the *eucalyptus* oils absorb atmospheric oxygen, transforming it into peroxide of hydrogen.*

If the change effected be the production of ozone, and the latest known experiments on the subject, confirmed by Dr. Andrews, appear to leave no doubt that this is the case, then another link is added to the evidence that the *eucalyptus* vegetation has an important action on climatic influences. Dr. Andrews remarks, that “no connection has yet been proved to exist between the *amount* of ozone in the atmosphere and the occurrence of epidemic or other forms of disease”; but remarks, “its absence from the air of towns and of large rooms even in the country is probably the chief cause of the difference which every one

* Dr. Day, of Geelong, recommends as an excellent and very agreeable disinfectant, deal sawdust, mixed in the proportion of about one ounce of ol. eu. amyg. to the bushel; and remarks that after keeping it mixed for four months he found it to contain a much larger quantity of peroxide of hydrogen than it did when first mixed, and that it continued to accumulate.

feels when he breathes the air of a town or of an apartment, however spacious, and afterwards inhales the fresh or *ozone-containing* air of the open country." Let a small quantity of any of the *eucalyptus* oils, but especially the oil of the *eucalyptus amygdalina*, be distributed sparingly in a sick chamber, or over any unpleasant substance, or add a small quantity to stagnant water, and the pleasure of breathing an improved air will immediately be manifest. The application of this to the climate of Australia has great force, for it is acknowledged that we possess about us, both in bush and town, a large amount of active oxygen, made frequently doubly so by our vigorous vegetation.

As evidence on this part, let me refer to the circular issued last May by the Central Board of Health to the medical profession, inviting "further information respecting the continued fevers now prevailing in and around Melbourne."

The following is one of a list of questions forwarded:—

"7. Have seasonal peculiarities influenced the fevers?"

Speaking as one outside of that profession, the following may be stated:—That the leading oil-producing species of the *eucalypti* were, during the season prior to last May, extra poor in volatile oil, and if any connection exists between the amount of ozone in the atmosphere and the occurrence of epidemic or other forms of disease, we have given ample evidence that large quantities of the oxidising agent usually known to exist in Victorian air during that season were absent.

Having arrived at the close of the three queries set down at starting, the question now lies before us—Is the *eucalyptus* a fever-destroying tree?

We have observed that the physical geography of Australia differs in no way from that of other countries.

That the vegetation is specially its own.

That it contains peculiarities and principles adapted to benefit a country.

That, to judge of its effect on climate, malaria, or fever germs, the physical and chemical characters of this vegetation must be considered.

Physically.—1st. Its powerful root action as an absorbent of humidity from the earth, by being an evergreen, and so continuous in its work.

2nd. Its leaf formation and presentation.

3rd. The abundance of leaf surface.

4th. Its leaf evaporation of water, oil, and acid, under a perpetually genial temperature.

Chemically.—1st. Its volatile oil.

2nd. Its volatile acid.

3rd. Their power of producing peroxide of hydrogen.

And finally—The evidences of the abundance of these volatile bodies, both in the plant and in the air. In the plant—By experiments conducted on one or more of the species throughout all seasons of the year, and almost continuously since 1853. In the air—By the sense of smell and by morphological deductions.

From all this we gather that there is an active agency existing in

our vegetation over that of other countries. That whatever change may take place in the condition of the atmosphere, arising from the free and large supply of these chemical bodies in the air, it is from all known evidence of an invigorating and healthy nature and character.

The various fever types as found existing amongst us at times appear malignant, arising either from importation or from the existence of bad sanitary regulations; but medical testimony is that their virulence is meteor-like, "dies at its opening day." No credit can be taken for any improved sanitary condition of our surroundings by ourselves in our towns and cities, the influences operating there *entice* the poison fever germ to fructify and abound.

"Death lives where power lives unused," and were it not that such happy and benign influences, as those exerted by the *eucalyptus* vegetation, existed around us *independent of ourselves*, we might mourn our fate.

In conclusion, may we not say with some authority that the evidence set forth in this paper on our own vegetation is in favour of the *eucalyptus* being a fever-destroying tree?

BOSISTO, JOSEPH, Bridge-road, Richmond.

PREPARATIONS FROM THE EUCALYPTUS. ✱

The Eucalyptus or Gum Trees of Australia and their preparations have for some time past attracted considerable attention. The numerous species of the Eucalypti possess variable characteristics, both in their physical structure, and in their outward appearance.

On the Continent of Europe the arboreal, health-producing, and Medicinal products of the Eucalyptus globulus, or Blue Gum tree, have been so much enlarged upon in consequence of having only this species in cultivation, that the whole of the Eucalyptus products have been classified as emanating from this one species; it is necessary therefore to point out that such is not the case.

Chemical and Pharmaceutical Preparations obtained from the Eucalyptus and other Indigenous Vegetation, prepared and exhibited by Joseph Bosisto, Richmond, Melbourne, President of the Pharmaceutical Society of Victoria, by whom the Eucalyptus preparations were first introduced, both in Australia and in Europe:—

EUCALYPTUS VEGETATION.

1046 Essential Oil, Eucalyptus globulus (Blue Gum). Tonic, stimulant, antiseptic, and anthelmintic.

A small dose promotes appetite, a large one destroys it. In stronger doses of 10 to 20 minims, it first accelerates the pulse, produces pleasant general excitement (shown by irresistible desire for moving about), and a feeling of buoyancy and strength. Intoxicating in very large doses, but unlike alcohol or opium, the effects are not followed by torpor, but produce a general calmness and soothing sleep. A strong cup of coffee will at once remove any unpleasantness arising from an overdose.

Anthelmintic—By enema 30 to 60 minims in mucilage of starch.

Internally—Dose 3 to 5 minims in gum mucilage, syrup, or glycerine.

- 1047 Eucalyptol, *Eucalyptus globulus* (Blue Gum). For inhalation in bronchial and throat affections. Obtained from the Essential oil and is a homologue of camphor.
Quantity employed:—From half to one teaspoonful with half a pint of hot water in the Inhaler.
- 1048 Eucalyptic Acid, ordinary strength, { Volatile obtainable by
Eucalyptus globulus (Blue Gum) } fractional distillation,
 1049 Eucalyptic Acid, concentrated. } most abundant in the Red
} and Blue Gum species.
- 1050 Liquor Eucalypti globuli, *Eucalyptus globulus* (Blue Gum).
Antiperiodic. The tonic or bitter principle obtained from the leaves of the tree in an amorphous condition. An ague remedy. It appears to counteract malaria without exerting the prejudicial effects of quinine on the nervous system.
For Ague and Dengue Fever 30 to 60 minims in half a wine-glassful of mucilage and water, or glycerine and water, with the occasional addition of two minims of Eucalyptol every two or three hours during the paroxysms of Ague.
As a general Tonic 20 to 30 minims three times a day.
Incompatibles.....The Mineral Salts.
- 1051 Tinct. Eucalypti Globuli. Stimulant, tonic, antiperiodic and antiseptic.
Dose—20 to 30 minims.
- 1052 Pulv. *Eucalyptus Globulus Folia*.
Antiseptic.—Cataplasma.
- 1053 Cigarettes, *Eucalyptus globulus* (Blue Gum). Disinfectant employed in bronchial and asthmatic affections.
- 1054 Essential Oil, *Eucalyptus amygdalina odorata* (Peppermint Gum).
Rubefacient and disinfectant. This oil is generally known as the “*Eucalyptus Oil*,” employed externally in rheumatic affections, and in the manufactories chiefly for perfumery, soaps, &c. An excellent and very agreeable disinfectant if mixed with sawdust in the proportion of four ounces of oil to the bushel.
- 1055 Ointment of *Eucalyptus odorata*. Employed in fœtid suppurations and indolent wounds.
- 1056 Red Gum. (From *Eucalyptus rostrata* of Victoria). The delicate mucilaginous astringent possessed by this species of the *Eucalypti* renders it more effective than the *Acacia catechu* in all cases of dysentery, diarrhœa, and throat affections. Generally employed in the form of a syrup.
- 1057 Essential Oil, *Eucalyptus oleosa* (Mallee Scrub). Employed chiefly in the manufacture of oil and spirit varnishes. Varnish containing this oil in the place of spirits of turpentine is said neither to bloom nor crack. It is a perfect solvent of india-rubber without heat.
- 1058 India-rubber with the Essential Oil, *Eucalyptus oleosa* (Mallee Scrub). Showing the two in combination.
- 1059 Potash, *Eucalyptus oleosa* (Mallee Scrub). Obtained from the scrub after being deprived of its volatile oil.
- 1060 Essential Oil, *Eucalyptus rostrata* (Red Gum of Victoria).

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| 1061 | Essential Oil, <i>Eucalyptus sideroxylon</i> (Ironbark Gum) | } Specimen Samples showing the variety of aroma existing in the Eucalypti. |
| 1062 | Essential Oil, <i>Eucalyptus persicifolia</i> (Peach Gum) | |
| 1063 | Essential Oil, <i>Eucalyptus citriodora</i> (Sweet-scented Gum, Queensland) | |
| 1064 | Essential Oil, <i>Eucalyptus fissilis</i> (Messmate) | |
| 1065 | Essential Oil, <i>Eucalyptus Stuartiana</i> (Apple-tree Gum) | |
| 1066 | Essential Oil, <i>Eucalyptus goniacalyx</i> (White Gum) | |

INDIGENOUS.

- 1067 Essential Oil, *Atherosperma moschatum* (Native Sassafras). Diaphoretic, diuretic and sedative. Obtained from the bark, it exerts a specific lowering influence on the heart's action.
- 1068 Atherospermine, *Atherosperma moschatum* (Native Sassafras). An alkaloid obtained from the bark. Tonic.
- 1069 Salts of Lime, *Atherosperma moschatum* (Native Sassafras). Obtained from the bark.
- 1070 Bark, *Atherosperma moschatum* (Native Sassafras).
- 1071 Essential Oil, *Melaleuca ericifolia* (Teatree).
- 1072 Resin, *Pinus callitris* (Murray Pine). Obtainable in quantity from under the pines growing on ridges in the Mallee country.
- 1073 Resin, *Xanthorrhoea Australis* (Grasstree of Australia). Soluble in spirit, of a deep amber colour, obtainable in large quantities; employed for staining wood to imitate cedar.

NON-INDIGENOUS.

- 1074 Opium, *Papaver somnifera* (Sleeping Poppy). Cultivated in Victoria, yielding ten per centum of Morphia.
- 1075 Morphia, from the Victorian Opium.
- 1076 Capsules, *Papaver somnifera* (Sleeping Poppy). Specimens of growth.
- 1077 Essential Oil, *Mentha piperita* (English Peppermint). Cultivated in Victoria, and distilled by exhibitor four years ago.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 1078 Sullivan's Disinfectant Preparations.
- 1079 Chemicals, prepared by Mr. Boardman.
- 1080 Chemical Preparations, from Mr. Bosisto.

HOOD & CO., Elizabeth-street, Melbourne.

- 1081 Liq. Ergotæ, prepared on a new principle.
- 1082 Liq. Ammon. Carbazotatis.
- 1083 Liq. Copaibæ.
- 1084 Phosphorised Cod Liver Oil.
- 1085 Cod Liver Oil and Quinine.
- 1086 Cod Liver Oil and Iron.
- 1087 Cod Liver Oil and Hypophosphites of Iron, Lime, and Potash.
- 1088 Fluid Magnesia.

- 1089 Compound Syrup of Phosphates (chemical food).
- 1090 Syrup of Superphosphate of Iron, Quinine, and Strychnine.
- 1091 Solution of Bismuth.
- 1092 Compound Solution of Bismuth.
- 1093 Spirit of Sal volatile.
- 1094 Spirit of Nitre.
- 1095 Oil of Peppermint, distilled from the herb, grown near Melbourne.
- 1096 Oil of Lavender, distilled from colonial flowers.
- 1097 Oil of Sandalwood, distilled from Western Australian woods.
- 1098 Iodide of Potash.
- 1099 Iodine, from colonial seaweed.
- 1100 Bromide of Potash.
- 1101 Pills, coated with a tasteless coating.
- 1102 Perfumery.
- 1103 Chlorodyne.
- 1104 Syrup of Chloral.
- 1105 Victorian Opium, from Smyrna poppy-seed, first introduced into the colony by exhibitors.

LEWIS & WHITTY, Charles-street, Fitzroy.

- 1106 Washing Powder.
- 1107 Baking Powder.
- 1108 Ball Blue.

STRINGER & CO., 43 King-street, Melbourne.

- 1109 Baking Powder.

SULLIVAN, JOSEPH, Melbourne.

- 1110 Poor Man's Filter, a slop-pail filter for deodorising and filtering slops from bedrooms.
- 1111 Sullivan's Disinfectant Powder.
- 1112 Sullivan's Disinfectant Fluid.
- 1113 Fluke Specific and Lick. For the cure of fluke and worms in sheep and cattle.
- 1114 Hydrated Silicate of Aluminum. Extracted from granite, and preventive of bed sores.

WOODWARD, GEORGE, Cotham Road, Kew.

- 1115 Samples of Guano, Deodorised Bone Dust.
- 1116 Deodorants, in powder and liquid.
- 1117 Block of Deodorised Nightsoil.

CLASS 201.—Oils, soaps, candles, illuminating and other gases.

Oils from mineral, animal, and vegetable sources. Refined petroleum, benzine, naphtha, and other products of the manufacture. Oils from various seeds, refined, and of various degrees of purity. Olive oil, cotton-seed oil, palm oil. Animal oils, of various kinds,

in their refined state. Oils prepared for special purposes besides lighting and for food. Lubricating oils.

Soaps and detergent preparations.

Candles, stearine, glycerine, paraffine, &c., spermaceti.

Illuminating gas and its manufacture.

Oxygen gas, and its application for heating, lighting, metallurgy, and as a remedial agent.

Chlorine and carbonic acid.

FITTS, CHARLES, & SONS, 67 Cecil-street, Emerald Hill.

1118 Neatsfoot Oil.

1119 Trotter Oil.

KITCHEN & SONS, Little Flinders-street West, Melbourne.

1120 Stearine Candles.

1121 Large Carriage Candles.

CLASS 202.—Paints, pigments, dyes, colours, turpentine, oils, varnishes, printing inks, writing inks, blacking.

BORTHWICK, ALEXANDER, 35 Market-street, Melbourne.

1122 Varnishes, manufactured by the Victoria Varnish Company.

1123 Antifouling Composition for Ships' Bottoms, patented by exhibitor.

1124 Cast Iron Pedestal Pillars, enamelled by exhibitor's process.

1125 Anticorrosive Paint.

BOWMAN, JOHN S., 31 Russell-street, Melbourne.

1126 Colonial Crayons, made principally from colonial clays, containing 600 shades.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1127 Crayons.

LEWIS & WHITTY, Charles-street, Fitzroy.

1128 Blacking.

CLASS 203.—Medicinal compounds, flavouring extracts, essences, perfumery, pomades, cosmetics.

HOGG, S. P., & CO., Collins-street West, Melbourne.

1129 Curry Powder.

LEWIS & WHITTY, Charles-street, Fitzroy.

1130 Perfumed Hair Oil.

1131 Culinary Essences.

1132 Curry Powder.

CLASS 204.—Explosive and fulminating compounds; in small quantities only, and under special regulations, shown in the building only by empty cases and cartridges. Black powder of various grades and sizes. Nitro-glycerine, and the methods of using and exploding. Giant powder, dynamite, dualin, tri-nitro-glycerine.

PERRY, HUNTER & CO., Forest-street, Sandhurst.

1133 Varieties of Safety Fuse.

CERAMICS, POTTERY, PORCELAIN, &c.

CLASS 206.—Bricks, drain-tiles, terra cotta, and architectural pottery.

BIRMINGHAM & LACEY, Barkly-street, Brunswick.

1134 Red Building Bricks.

1135 White Pressed and Moulded Bricks.

NOLAN, LUKE, Gillbrook Pottery, Brunswick.

1136 Stoneware Draining Pipes.

CLASS 207.—Fire clay goods, crucibles, pots, furnaces. Chemical stoneware.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1137 Fireclay Crucibles.

CLASS 208.—Tiles, plain, enamelled, encaustic; geometric tiles and mosaics. Tiles for pavements and for roofing, &c.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1138 Encaustic Tiles, Trusses, Vases, &c.

CLASS 210.—Stone china, for chemists, druggists, &c., earthenware, stoneware, faience, &c.

ADAMS, R. T., Prince's Bridge, Melbourne.

1139 Earthenware Household and Office Filters, 10 gallons, 6 x 3.

1140 Syphon Tank Filter, with 12 feet of tube.

1141 High-pressure Copper Filter, inside silvered, self-cleansing, for public institutions, schools, &c., made expressly for the Yan Yean and other Water-works.

BENDIGO POTTERY COMPANY, Sandhurst.

1142 Earthenware Worm, for Still.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

1143 Earthenware and Pottery.

NOLAN, LUKE, Gillbrook Pottery, Brunswick.

1144 Bronze Vases.

1145 Stone Porous Jugs.

1146 Patent Damp-proof, for floor ventilation.

GLASS AND GLASSWARE.

CLASS 214.—Glass used in construction and for mirrors. Window glass of various grades of quality and of size. Plate glass, hammered, and ground or polished. Malleable glass.

FERGUSON & URIE, Collins-street East, Melbourne.

1147 Stained Glass, for windows.

CLASS 215.—Chemical and pharmaceutical glassware, vials, bottles.

GLEDHILL, Melbourne.

1148 Glass Bottles.

MELBOURNE GLASS BOTTLE WORKS COMPANY,
Emerald Hill.

1149 Glass Bottles.

MOUNT & CO., Graham-street, Emerald Hill.

1150 Assortment of Glassware.

CLASS 216.—Table and decorative glassware.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

1151 Glassware.

FURNITURE AND OBJECTS OF GENERAL USE IN
CONSTRUCTION AND IN DWELLINGS.

CLASS 217.—Heavy furniture.—Chairs, tables, parlour and chamber suites, office and library furniture. Church furniture and decoration.

ALCOCK & CO., Russell-street, Melbourne.

1152 Blackwood Billiard Table, with carved legs, Huon-pine twist mouldings and panels.

1153 Billiard Cues, Rests, and Balls.

1154 Cue Stand.

1155 Combination Marking Board.

1156 Cue Stand, with specimens of spiral twist work in Australian wood.

1157 Console Table.

CARR & SONS, 128 Spring-street, Melbourne.

- 1158 Inside Venetian Blind, with check action.
- 1159 Wire Blind.
- 1160 Spanish and Florentine Blinds.
- 1161 Spring Roller Blind.
- 1162 Dwarf Blind.
- 1163 Window Sash, with Venetian shutters, &c.

DAVIS, J., Richmond.

- 1164 Davis's Patent Window Sash.

HODGSON BROTHERS, View Place, Sandhurst.

- 1165 Patent Self-acting Venetian Blind.
- 1166 Spring Roller Blind.

The special feature in this exhibit is the new and improved method of painting the Venetian Blind, it being superior and more lasting than the usual method of treating the mineral green used for painting.

McEWAN, JAMES, 361 Spencer-street, Melbourne.

- 1167 Eight-feet Sideboard, made of picked Richmond Cedar. The carving enrichments consist of nine carved figures, the centre ornament, on glass back, represents the head of Minerva.

CLASS 219.—Mirrors, stained and enamelled glass, cut and engraved window-glass, and other decorative objects.

MUSCHIALLI, LOUIS, 102 Collins-street East, Melbourne.

- 1168 Pier Glass.
- 1169 Console Table.

CLASS 220.—Vestibule and hall furniture, rubber and cocoa mattings, shoe cleaners, umbrella-stands, &c.

BAKER, JOHN, Emerald Hill.

- 1170 Baker's Patent Safety Steps.

CLASS 221.—The nursery and its accessories; children's chairs, walking chairs.

WIEGMANN, AUGUST, 45 Post-office Place, Melbourne.

- 1171 Basketware Cradles.
- 1172 Basketware Perambulators.
- 1173 Basketware Chairs.
- 1174 Basketware Flower Stands.
- 1175 Baskets.

CLASS 222.—Apparatus and fixtures for heating and cooking.—Stoves, ranges, heaters, &c.

WALKER, A. R., 40 Latrobe-street West, Melbourne.

- 1176 Reflector Gas Cooking Stove.
 - 1177 Reflector Gas Cooking Stove, with Boiler.
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CLASS 224.—Kitchen and pantry.—Utensils, tinware, and apparatus used in cooking (exclusive of cutlery).

SHAW, ALFRED, & CO., 13 Little Collins-street West.

- 1178 Millet Brooms and Whisks.

GUTHRIE, G. D., Epsom, Sandhurst.

- 1179 Collection of Pottery Ware in cane, rockingham, brownware, granite, &c., consisting of bread pans, butter jars, cheese dishes and pans, cream pots, churns, jam pots, jelly jars, pudding bowls, baking dishes, jugs, jars, pipkins, wicker, jars and bottles, teapots, gallon bottles, gingerbeer bottles, kegs, water filters, blacking bottles, footpans, footwarmers, spittoons, fowl fountains, grate backs, &c.

BOGLE, ANDREW & CO., 21 Flinders-street East, Melbourne.

- 1180 The Household Help—Bogle's Patent Boot and Shoe Brushing and Cutters' Polishing and Sharpening Machine.
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CLASS 225.—Laundry appliances, washing machines, mangles, clothes wringers, clothes bars, ironing tables.

PAUSACKER, EVANS & CO., 8 Lonsdale-street West, Melbourne.

- 1181 Registered-edge Solid Leather Portmanteaus, of colonial make, leather and workmanship.
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CLASS 226.—Bath-room and water closet, shower bath, earth closet.

DRAPER & SONS, 83 Bourke-street West.

- 1182 Patent Earth Closets and Fittings.
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YARNS AND WOVEN GOODS OF VEGETABLE OR MINERAL MATERIALS.

CLASS 229.—Coarse Fabrics, of grass, rattan, cocoa nut, and bark. Mattings, Chinese, Japanese, palm-leaf, grass, rushes. Floor cloths of rattan and cocoa nut fibre, aloe fibre, &c.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- | | | |
|------|---|-------------------------------------|
| 1183 | New Zealand Flax, in natural state. | } Manufactured by J. Miller and Co. |
| 1184 | Log Line. | |
| 1185 | Manila Clothes Line. | |
| 1186 | Lead Line. | |
| 1187 | Marline. | |
| 1188 | Wire Rope, for ships' rigging. | |
| 1189 | Coir Warp. | |
| 1190 | Cable-laid Manila Rope. | |
| 1191 | Hide Rope, made from bullock's hide. | |
| 1192 | Murray Cod Fishing Line. | |
| 1193 | Italian Rope. | |
| 1194 | Manila Rope. | |
| 1195 | Bell Rope. | |
| 1196 | Cloth, made from New Zealand flax. |  | } Manufactured by Jas. McNeilly. |
| 1197 | Rope, from New Zealand flax. | |
| 1198 | Sash Lines, from New Zealand flax. | |
| 1199 | Plough Reins, from New Zealand flax. | } Manufactured by J. Miller and Co. |
| 1200 | New Zealand Flax Clothes Lines. | |
| 1201 | Sash Lines. | } Manufactured by Jas. McNeilly. |
| 1202 | Victorian Flax, in natural state. | |
| 1203 | Log Line, New Zealand flax. | |
| 1204 | Murray Cod Line, Net Twine. | } Manufactured by Jas. McNeilly. |
| 1205 | Whipcord, Twine, Lead Line. | |
| 1206 | Cords, Lines, and Twines, from South Australian flax, manufactured by Sharp and Sons. | |
| 1207 | Rope, manufactured by Crawford and Maine. | |

DONAGHY, MICHAEL, Rope Works, Geelong.

- 1208 Manila Flat Rope.
 1209 Italian Lash Line.
 1210 Deep-sea Line.
 1211 Ham Twine.

MILLER, JAMES, & CO., 61 Flinders-street, Melbourne.

- 1212 European Rope.
 1213 Manila Rope.
 1214 Coir Hawser.
 1215 Deep-sea Lead Line.
 1216 Sash Line.
 1217 Manila Clothes Line.
 1218 Whale Line.

M'PHERSON, THOMAS, 205 Bourke-street West, Melbourne.

- 1219 Cornsacks.
 1220 Woolpacks.
 1221 Sugar Bagging.

WOVEN AND FELTED GOODS OF WOOL AND MIXTURES
OF WOOL.

CLASS 235.—Card wool fabrics.—Yarns, broadcloth, doeskins, fancy cassimeres.

BARWON WOOLLEN MILL COMPANY, Geelong.

1222 Tweeds, manufactured at the Barwon Woollen Mill Company, Geelong.

GRAY, ALEXANDER, & CO., Albion Woollen Mills, Geelong.

1223 Plain and Fancy Tweeds, manufactured at the Albion Woollen Mills, Geelong.

CLASS 237.—Blankets, robes, and shawls.

BALLARAT WOOLLEN COMPANY, Ballarat.

1224 Shawls.

1225 Tweeds.

1226 Blankets.

BARWON WOOLLEN MILL COMPANY, Geelong.

1227 Blankets, manufactured by the Barwon Woollen Mill Company, Geelong.

CLASS 238.—Combined wool fabrics.—Worsted, yarns, dress goods for women's wear, delaines, serges, poplins, merinoes.

BOTANIC GARDENS, DIRECTOR OF, Melbourne.

1227A Woollen Cloth and Silk, dyed with bark of *Laportea gigas*—the Tree Nettle, Queensland and New South Wales. Prepared by W. R. Guilfoyle (A 5).

1227B Woollen Cloth and Silk, dyed with husks of *Sterculia diversifolia*—the Native Wattle Tree, Victoria. Prepared by W. R. Guilfoyle (A 6).

1227C Woollen Cloth; also, piece of Silk, dyed with bark of *Pimelia axiflora*—Currijong of the aborigines, Victoria. Prepared by W. R. Guilfoyle (A 4).

1227D Woollen Cloth; also, piece of Silk, dyed with bark of *Dais continifolia*, South Africa. Mordanted with acetate of iron. Prepared by W. R. Guilfoyle, director of Melbourne Botanic Gardens.

CLASS 240.—Hair, alpaca, goat's hair, camel's hair, and other fabrics, mixed or unmixed with wool.

ROBERTSON, JOHN, 39 Lonsdale-street East, Melbourne.

1227E Dyed Angora Goat's Fleece, grown and prepared by the exhibitor.

ZOOLOGICAL AND ACCLIMATISATION SOCIETY, Melbourne.

- 1227F Angora Goat's Hair, grown at Sir Samuel Wilson's Mount Bute Estate, shorn from the Angora flock belonging to the above Society.
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SILK AND SILK FABRICS, AND MIXTURES IN WHICH SILK IS THE PREDOMINATING MATERIAL.

CLASS 242.—Cocoons and raw silk as reeled from the cocoon, thrown or twisted silks in the gum.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 1228 Silk Cocoons, from the Acclimatisation Society, Victoria.
 1229 Silk Cocoons, from Mrs. Bladen Neill.
 1230 Cultivated Silk, in cocoons and hanks, also bleached, dyed, and worked upon llama.

TIMBRELL, ANN, Plenty Road, Collingwood.

- 1231 Cocoons, produced by silkworms from Japan, France, Italy, and Greece.

VICTORIA LADIES' SERICULTURE COMPANY (LIMITED), Mount Alexander, Castlemaine.

- 1232 Silk, Desiccated and Pierced Cocoons.
-

CLASS 243.—Thrown or twisted silks, boiled off or dyed, in hanks, skeins, or on spools.

TIMBRELL, ANN, Plenty-road, Collingwood.

- 1233 Silk (raw material in hank).
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CLASS 246.—Figured silk piece goods, woven or printed. Upholstery silks, &c.

TIMBRELL, ANN, Plenty-road, Collingwood.

- 1234 Victorian Silk, worked on Brussels net.
-

CLOTHING, JEWELLERY, AND ORNAMENTS, TRAVELLING EQUIPMENTS.

CLASS 251.—Hats, caps, boots and shoes, gloves, mittens, &c., straw and palm-leaf hats, bonnets, and millinery.

FORD BROTHERS, 421 King-street, Melbourne.

- 1235 Pith Hats, in Felt, Silk, Merino, &c.

PENAL DEPARTMENT, INSPECTOR-GENERAL OF, Melbourne.

1235A Elastic-side Boots.

1235B Gents' Shoes.

1235c Blucher Boots.

ROSIER, JOHN, 46 Swanston-street, Melbourne.

1236 Boots and Shoes.

1237 Studies from the Feet of the Statues in the Statuary Gallery,
Melbourne Public Library.

CLASS 254.—Artificial flowers, coiffures, buttons, trimmings, pins, hooks and eyes, fans, umbrellas, sun-shades, walking-canes, pipes, and small objects of dress or adornment, exclusive of jewellery.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1238 Myall Pipes.

1239 Rouleau Boxes, made of myall wood.

FORD BROTHERS, 421 King-street, Melbourne.

1240 Pith Sunshades for Horses.

DE RICHELIEU, MADAME F., Union-street, Windsor.

1241 Ornaments made from Fish Scales, &c.

CLASS 255.—Fancy leather work, pocket-books, toilet cases, travelling equipments, valises and trunks.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1242 Address Case of Inlaid Leather. Made by J. W. Evans.

PAPER, BLANK BOOKS, AND STATIONERY.

CLASS 260.—Printing paper for books, newspapers, &c.

Wrapping paper of all grades, cartridge and manilla paper, paper bags.

[The following letter from the Curator of the Botanical Gardens, Melbourne, is explanatory of the exhibits forwarded by that Department:—]

TO THE COMMISSIONERS FOR THE MELBOURNE EXHIBITION.

Gentlemen,—I have the honour, as you request, to furnish a descriptive list of the fibres, papers, gums, resins, dyes, woods, carpological specimens, &c., &c., prepared and sent by me to the Melbourne Exhibition, and which you have been pleased to forward to Philadelphia.

As regards the fibres, papers, and woods, it must be admitted they far exceed in number those which have been sent from this establishment to former Exhibitions. The whole of the exhibits described were prepared by myself and two assistants with but crude appliances at our command,

and within EIGHT WEEKS prior to the opening of the Exhibition. The greater portion of the necessaries forming the Laboratory which once belonged to this department, were transferred to another branch ; thus I have had to make the best of the few opportunities afforded me for preparing in so short a time the present collection. The fibres, some forty in number, were produced in a very primitive way ; the branches or leaves of the plants being merely steeped in water, and afterwards combed by hand. The quality and quantity, however, of each kind thus prepared will, I trust, serve the purpose of testing their commercial value at Philadelphia.

Many new discoveries in the way of fibre-yielding material are shown, not only of Victorian native products, but those of the other colonies acclimatised here, and of exotics also hitherto esteemed only for ornamental purposes in gardening.

Had time permitted, my collection of exhibits would have been far greater. I would have been able to collect and test the value of many plants which I know exist on the borders of Gippsland, and even nearer to Melbourne—I mean the Macedon and Dandenong Ranges. It is almost needless for me to say that the colony of Victoria affords great facilities, both as regards soil and climate, for the cultivation of the valuable commodities which constitute fibre and paper material. For instance, the Chinese grass-cloth plant "*Bœhmeria nivea*," the New Zealand flax, "*Phormium tenax*," the "*Fourcroya gigantea*," the "*Agaves*," the "*Lagunaria Pattersoni*"—Cowitch tree, of Norfolk Island ; the *Yuccas aloifolia*, *filamentosa*, and *gloriosa* ; the *Abutilons* and *Hibiscus*, of India, China, and America ; the *Sparmannia Africana*, and a host of other foreign plants all thrive as well, and in some instances better, in this colony than in their native homes.

The samples of *Sparmannia* sent to the Melbourne Exhibition have been prepared from both the living and dried barks of the shrub. I have never read of it ever having been discovered that this plant contained a fibre of any value. Hitherto I had only known it to be interesting as an ornamental shrub, or the plant in whose blossoms the great Linnæus first discovered the sexual system in botany. My introspection of its fibrous nature, as with others now exhibited, was only gained by mere accident in a hurried attempt to collect and prepare a variety of fibres for your Exhibition, but if even one of them proves to be of commercial value, and I believe *many* of them will, because of their textures, and the quickness of their growth ; the object I have in view will be gained, as they will be a boon to the colonists. The *Sparmannia*, like the grass-cloth plant of China, as soon as cut shoots up (even in a poor soil) with wonderful vigour. The canes, if I may call them such, are often as thick as one's thumb, and they average in height from 6 to 8 feet. In good soil, two crops may be safely reckoned upon in the year.

The plants of Queensland, from which fibres have been prepared, have all been grown here, and were introduced by the late Mr. Dallachy and the Baron von Mueller, my predecessors in the directorship of these Gardens. Judging from the growth of the *Hibiscus heterophyllus*, *Sida retusa* (Queensland hemp), *Pipturus propinquus*, or Queensland grass-cloth plant, *Brachychiton acerifolium* "the flame tree," *Sterculia rupestris*—

“the bottle tree,” and the samples of fibre now produced from them; the harvest to be gained by their cultivation in Victoria would be as great as in the sister colony. It may appear strange to many, that plants like these and others described indigenous to a warmer clime should thrive as well, and even better, in a cooler one, yet there are ample proofs that such is fact. The growth of the flame-tree for instance (*Sterculia* or *Brachychiton acerifolium* of Queensland and New South Wales), is more rapid in Victoria than in either of the colonies mentioned, and the *bast* furnished by this tree is, I consider, superior to “*Cuba bast*.” This, of course, remains to be proved by those in Philadelphia, who are better able to judge of its merits, and of others which I have described in my list. But it is more singular still, to observe, that plants which grow side by side with these in warmer latitudes, will not *grow* here at all, but merely exist. “*Laportia gigas*,” the great stinging tree of which I have sent samples of fibre from plants which never attain in this garden more than four feet in height—being cut down by frost every winter—yet I have seen it beside the flame-tree in the brush lands of Queensland and New South Wales, attaining a height of 75 feet, and with a trunk more than 5 feet in diameter.

The *Pipturus propinquus*, *Sterculia rupestris*, *Sida retusa*, and many others, grow as quickly here as in Queensland. Quite as good results, therefore, might be expected by cultivating these plants; but need we go further than our own colony of Victoria for quality or quantity of fibre or paper material, when our forests teem with valuable plants suitable for their manufacture? If we only instance the *Pimelias*, *Dianellas*, *Plagianthus*, *Cladiums*, *Lepidosperma*, or “*Mat-Grass*,” *Commersonia*, *Brachychiton populneum*, *Urtica incisa*, *Cyperus*, *Typha*, *Scirpus*, *Carex*, *Isolepis*, and the rushes *Juncus vaginatus*, *maritima*, and *pauciflora* (and there are scores of other indigenous plants equally valuable), *rags* need no longer be collected for paper making, or introductions from other countries for cordage. With sixty millions of acres of good land included between the parallels 30° and 39° south latitude, we can, without cultivation, reap abundant harvests of paper material, even from various species of *Eucalypti*, *Xerotes*, *Melaleuca*, *Cyperus*, and others, and, indeed, from some of the grasses which are plentiful in their midst. Our native vegetable resources are great, and should therefore be thoroughly searched up. My thirty crude samples of paper, which are sent in frames, were prepared under great difficulties, and they were only made to prove what can be done with some of our native plants. Many of them are new, but the indefatigable Mr. Ramsden, of the Victorian Paper Mills, has devoted his attention particularly to the manufacture of paper from Victorian plants, and he will, no doubt, be able to add to his collection long before the colony has been thoroughly explored.

The Dyes, forwarded in bottles, are not so numerous as they would have been had time permitted me to send out collectors; but the samples of silk, calico, and woollen material stained with them show a variety of beautiful colours, the value of which will, no doubt, be proved at Philadelphia.

I regret to have to say that my collection of Woods could not be

properly seasoned. Some of them were polished within a week after they were cut from the tree, consequently many of the specimens have split from end to end.

I have the honour to be,

Gentlemen,

Your obedient Servant,

WILLIAM R. GUILFOYLE,
Director of Botanic Gardens, Melbourne.

BOTANIC GARDENS, DIRECTOR OF, Melbourne.

PAPER MADE FROM BARK OF—

- 1243 *Broussonetia papyrifera* (Paper Mulberry Tree).
- 1244 *Salvia Canariensis*.
- 1245 *Dais continifolia*.
- 1246 *Eucalyptus obliqua* (Stringybark).
- 1247 " *fissilis* (Messmate).
- 1248 *Abutilon mollis* (Soft-leaved Abutilon).
- 1249 " *venosum* (Veined Lantern Flower).
- 1250 *Pimelia axiflora* (Currijong).
- 1251 *Commersonia Fraseri*, Queensland (Lye Plant).
- 1252 *Pittosporum crassifolium* (Thick-leaved Pittosporum).
- 1253 *Pipturus propinquus* (Queensland Grasscloth Plant).
- 1254 *Melaleuca ericifolia* (Common Tea Tree).
- 1255 " *genistifolia* (Broom-leaved Tea Tree).
- 1256 *Sterculia diversifolia* (Victorian Bottle Tree).
- 1257 " *acerifolia* (Flame Tree).
- 1258 *Boehmeria nivea* (Chinese Grasscloth Plant).
- 1259 *Sida pulchella* (Victorian Hemp).
- 1260 " *retusa* (Queensland Hemp).
- 1261 *Melaleuca squarrosa* (Victorian Yellow-wood).

PAPER MADE FROM STEMS OF—

- 1262 *Urtica incisa* (Victorian Nettle).
- 1263 *Ehrharta tenacissima*.
- 1264 *Carex appressa*.
- 1265 " *pseudo-cyperus*.
- 1266 *Isolepis nodosa*.
- 1267 *Juncus pauciflorus* (Few-flowered Rush).

PAPER MADE FROM STEMS AND LEAVES OF—

- 1268 *Gahnia psittacorum*, var. *erythrocarpum*.
- 1269 *Lepidosperma elatius* (Tall Sword Rush).
- 1270 *Cordyline indivisa* (Tall Palm Lily).
- 1271 *Phormium tenax* (New Zealand Flax).
- 1272 *Gynerium argenteum* (Pampas Grass).
- 1273 *Arundo conspicua* (Plume Grass).
- 1274 *Fourcroya gigantea* (Giant Lily).
- 1275 *Cyperus* sp.
- 1276 *Juncus maritimus* (Coast Rush).
- 1277 " *vaginatus* (Small Sheathed Rush).
- 1278 " *vaginatus* (Large Sheathed Rush).
- 1279 *Lepidosperma gladiatum* (Coast Sword Rush).

- 1280 *Typha angustifolia* (Native Bulrush).
- 1281 *Scirpus fluviatilis*.
- 1282 *Marica Northiana*.
- 1283 *Xerotes longifolia* (Native Tussock Grass).
- 1284 *Pandanus utilis* (Screw Pine).
- 1285 *Cyperus lucidus*.
- 1286 *Conferva* sp. (Swamp Moss).
- 1287 *Dianella latifolia*.
- 1288 *Caryota urens* (Jaggery Palm).

RAMSDEN, SAMUEL, Prince's Bridge, Melbourne.

- 1289 Imperial White Cartridge.
- 1290 Printing Paper.
- 1291 Printing News Paper.
- 1292 Coloured Printing.
- 1293 Bookbinders' Pressings.
- 1294 Tea Cartridge.
- 1295 Tea Paper.
- 1296 Coffee Paper.
- 1297 Sugar Paper (Grey Royal Hand).
- 1298 Brown Wrapping.
- 1299 Thin Brown Wrapping.
- 1300 Thin Grey Demy.
- 1301 Grey Casing, made entirely from New Zealand grass.
- 1302 Grey Casing, made entirely from Victorian grass.
- 1303 Brown Wrapping, made entirely from Victorian grass.

MILITARY AND NAVAL ARMAMENTS, ORDNANCE, FIRE-ARMS, AND APPARATUS OF HUNTING AND FISHING.

CLASS 265.—Military small-arms, muskets, pistols, and magazine guns, with their ammunition.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 1304 Westley Richards' Breech-loading Rifle.

CLASS 268.—Knives, swords, spears, and dirks.

- 1305 Aboriginal Weapon. Native Axe.
- 1306 Victorian Aboriginal Implements and Weapons.

MEDICINE, SURGERY, PROTHESIS.

CLASS 279.—Vehicles and appliances for the transportation of the sick and wounded, during peace or war, on shore or at sea.

STANWAY, W., South Yarra.

- 1307 Models of Chairs for Invalids.

HARDWARE, EDGE TOOLS, CUTLERY.

CLASS 284.—Hardware used in construction, exclusive of tools and implements. Spikes, nails, screws, tacks, bolts, locks, latches, hinges, pulleys. Plumbers' and gasfitters' hardware, furniture fittings, ship's hardware, saddlers' hardware, and harness fittings and trimmings.

DANKS, JOHN, Bourke-street West, Melbourne.

- 1308 Steam Valves.
- 1309 Steam Cocks.
- 1310 Check Valves.
- 1311 Suet Lubricators.
- 1312 Injectors.
- 1313 Sluice Valves.
- 1314 Roscoe's Lubricators.
- 1315 General Brass Foundry.

McILWRAITH, JOHN, Little Collins-street East, Melbourne.

- 1316 Tinned Composition Gas Pipe, hydraulic pressed.
- 1317 Pure Victorian Tin Tube, hydraulic pressed.

CARRIAGES, VEHICLES, AND ACCESSORIES.

(For Farm Vehicles and Railway Carriages see Departments of Agriculture and Machinery.)

CLASS 296.—Carriage and horse furniture, harness and saddlery, whips, spurs, horse blankets, carriage robes, rugs, &c.

BOTHWELL, WADE, 52 Bank-street West, Melbourne.

- 1318 Lady's Saddle.
- 1319 Gentleman's Saddle.
- 1320 Set of Buggy Harness.
- 1321 Green Hide Girth.
- 1322 Lady's Riding Bridle.
- 1323 Gentleman's Hunting Bridle.
- 1324 Stock Whips, myall-wood handles.

GLENISTER, W. A., Mercer-street, Geelong.

- 1325 $1\frac{1}{4}$ inch Colling's Patent Axletree Arm.
- 1326 $1\frac{1}{4}$ inch Mail Patent Axle.
- 1327 $1\frac{1}{4}$ inch Improved Half-patent Axle.
- 1328 $1\frac{1}{4}$ inch Half-patent Axle.
- 1329 $1\frac{3}{8}$ inch Common Nut Axle.
- 1330 Model of Colling's Patent Crank.

STONEMAN, ALFRED, Stephenson-street, Richmond.

- 1331 Buggy Side Springs.
- 1332 Elliptic Side Springs.
- 1333 Spring Cart Side Springs.

CLASS 292.—Pleasure Carriages.

STEVENSON & ELLIOTT, King-street, Melbourne.

- 1334 Landau, with patent hood, patent steps, and patent fittings for inside seats.
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DEPARTMENT III.—EDUCATION AND SCIENCE.

EDUCATIONAL SYSTEMS, METHODS, AND LIBRARIES.

CLASS 300.—Elementary instruction. Infant schools and Kindergartens, arrangements, furniture, appliances, and modes of training.

Public schools, graded schools, buildings and grounds, equipments, courses of study, methods of instruction, text books, apparatus, including maps, charts, globes, &c.; pupils' work, including drawing and penmanship, provisions for physical training.

EDUCATIONAL DEPARTMENT OF VICTORIA, Melbourne.

- 1335 Photographic Views of State Schools in Victoria, viz.:—Golden Point, Ballarat; Mount Pleasant, Ballarat; Redan, Ballarat; Sebastopol, Ballarat; Golden-square, Sandhurst; Gravel Hill, Sandhurst; Sandhurst, Daylesford, Maryborough, North Clunes, Carisbrook, Mortchup, Talbot; Mount Doran, Cardigan, North Eaglehawk, Maldon, Beechworth, Buninyong, Coburg, Sandridge, North Ashby, Geelong; Swanston-street, Geelong; George-street, Fitzroy; North Fitzroy; Brighton-street, Richmond; Yarra-park, Richmond; Brighton, North Prahran, Hotham, Emerald Hill, St. Kilda, Gold-street, Collingwood; Latrobe-street, Melbourne.
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CLASS 303.—Institutions for instruction of the blind, deaf, and dumb.

VICTORIAN ASYLUM AND SCHOOL FOR THE BLIND
Melbourne.

- 1336 Soiled Linen Baskets, Travelling, Butchers', Grocers', Box, Clothes, Waste Paper, Glass, Knife, and Work Baskets.
 1337 Bassinets and Babies' Baskets.
 1338 Basket Perambulators.
 1339 Basket Reticules, Portmanteaus, and Trunks.
 1340 Chairs, Dog's House, &c.
 1341 Flowerstand Baskets.
 1342 Mats.
 1343 Fancy Woolwork, &c., &c.
 1344 The whole the work of the pupils of the Victorian Asylum and School for the Blind.

CLASS 305.—Libraries, history, reports, statistics, and catalogues.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

(Collection of Books printed in Melbourne.)

- 1345 Official Record of the Intercolonial Exhibition, 1866–1867.
- 1346 Official Record of the International Exhibition, 1872–1873.
- 1347 Melbourne University Calendar for the Academic Year 1874–1875.
- 1348 Catalogue of the Melbourne Public Library, 1861.
- 1349 Supplemental Catalogue of the Melbourne Public Library, 1865.
- 1350 Catalogue of the Donations to the Public Library of Victoria, 1866–1872.
- 1351 Descriptive Catalogue of the Mining, &c., Models in the National Museum, Melbourne. Part I.
- 1352 Catalogue of the Oil Paintings in the Public Library, Melbourne, 1875.
- 1353 Catalogue of the Casts, Busts, Reliefs, &c., in the Museum of Art, Melbourne.
- 1354 Catalogue of the Coins, Medals, &c., in the Museum of Art, Melbourne.
- 1355 Catalogue of the Casts of Statues, Busts, &c., in the Museum of Arts, Melbourne.
- 1356 Catalogue of the Objects of Ceramic Art, in the Museum of Art, Melbourne.
- 1357 Lectures delivered in the Industrial and Technological Museum, Melbourne, 1872–187–.
- 1358 Reports of the Trustees of the Public Library, 1870 to 1875.
- 1359 List of Books added to the Library of Parliament, from March, 1871, to March, 1873.
- 1360 Statistical Register of the Colony of Victoria for the year 1874.
- 1361 Victorian Year Book for 1873.
- 1362 Catalogue of the Library of the Supreme Court of Victoria, 1st and 2nd editions.
- 1363 The Land Act of 1869, with the Regulations, Orders, and Forms.
- 1364 Report on the Land Act of 1869, 1874.
- 1365 Reports of the Secretary for Agriculture, 1873 and 1874.
- 1366 Patents and Patentees' Indices from 1854 to 1873, 7 vols.
- 1367 Abstract of Specifications of Patents, Metals, part 1, 1854 to 1866.
- 1368 Abstract of Specifications of Patents, Ac to Bu, 1854 to 1866.
- 1369 Melbourne Directory for 1875.
- 1370 Acts, Orders in Council, &c., relating to the Goldfields.
- 1371 Local Government Manual.
- 1372 Queensland Post-office Directory for 1874.
- 1373 Official Post-office Directory of Victoria, 1875.
- 1374 Official Post-office Directory and Gazetteer of Victoria, 1872.
- 1375 Milton's *Il Penseroso*, with Notes by W. Powning, B.A.
- 1376 Milton's *L'Allegro* and Tennyson's *Ænone*, with Notes by W. Powning, B.A.

- 1377 Handbook of Examination Papers in Arithmetic and Algebra,
by I. W. Ball.
- 1378 On Hydatids of the Lung, by S. Dougan Bird.
- 1379 On Typhoid Fever, by William Thomson.
- 1380 On Phthisis, by William Thomson.
- 1381 Family Medical Index, by W. H. Jenkins.
- 1382 New Treatment of Snakebite, by Professor Halford.
- 1383 On the Analogy of Epizootic Pleuro-pneumonia to Epidemic
Measles, by William Thomson.
- 1384 Australian Medical Journal.
- 1385 Theory of the Causation of Dysentery, by Mucor.
- 1386 Treatise on the Constitutional Origin of Nervous Disorders, by
Charles T. Mackin.
- 1387 Cremation, by Resurgam.
- 1388 Victorian Stud Book, Vol. 14.
- 1389 Pure Saddle Horses, by E. M. Curr.
- 1390 Australian Turf Register, 1875.
- 1391 Australian Private Herd Book.
- 1392 The Angora Goat, by Samuel Wilson.
- 1393 Rules of the National Coursing Club.
- 1394 Cheese-making, by English, Scotch, and American authorities.
- 1395 Sheep-farming, by W. Farrer, B.A.
- 1396 The Godolphin Arabian.
- 1397 Agriculture in South Australia.
- 1398 Acclimatisation, by Dr. G. Bennett.
- 1399 Australian Gardener for 1875.
- 1400 Semi-tropical Agriculturist and Colonist's Guide, by Angus
Mackay.
- 1401 Reasons suggestive of Mining on Physical Principles for Gold and
Coal, by J. Wood Beilby.
- 1402 Gold Mining: its Results and its Requirements, by Thomas
Cornish.
- 1403 Whitehead's New Map of Victoria, 1875.
- 1404 Directory of Shires, Districts, and Boroughs, 1874.
- 1405 Outlines of Geography, by A. Buckley.
- 1406 Outlines of General Geography.
- 1407 Handbook of Examination Papers.
- 1408 Catechism for Bible Classes, &c., by Rev. John Cooper.
- 1409 Method to Learn French Without a Master, by G. Le Roy.
- 1410 Cicero's Cato Major and De Senectute, by A. Watson.
- 1411 Cæsar de Bello Gallico, Book 1, by A. H. Davis, B.A.
- 1412 English Grammar for Beginners, by R. S. Bradley.
- 1413 Geography for Young Australians, by J. Bonwick.
- 1414 Euclid, Australian Series of Test Cards, by J. G. Davis.
- 1415 Lycidas, with Notes by W. Powning, B.A.
- 1416 Chronology, Greek, Roman, and European, by Two Graduates.
- 1417 Handbook of the Land Acts of the Australian Colonies, by R. P.
Whitworth.
- 1418 How to Learn and Teach Languages, by G. Le Roy.
- 1419 Table of the Areas of Circles in Imperial Gallons to all Diameters.

- 1420 Hiscock's Atlas of the Settled Countries and Districts of Victoria.
- 1421 Batten's Student's Manual.
- 1422 Bendigo Gold Fields Registry, by J. N. Macartney.
- 1423 Life Abundantly, by M. C. Johnston.
- 1424 Cooper's Science of Spiritual Life.
- 1425 Time and its Earliest Records, by Rev. J. E. Bromby.
- 1426 Observations on the Book of Revelations, by W. Buchanan.
- 1427 This World and the Next, a Dramatic Poem.
- 1428 Week Day Religion, by E. Nosham.
- 1429 Sermons, by Rev. P. S. Menzies.
- 1430 Christian Psychology, by Rev. G. Sutherland.
- 1431 Truth in its Own Light, by Rev. J. Cooper.
- 1432 Origin and History of the New Testament, by Jas. Martin, B.A.
- 1433 Joy, Triumphant : or, Memoir of Mrs. M———, by Rev. R. Hamilton.
- 1434 The Believer's Riddle : or, The Mystery of Faith, by Rev. R. Erskine.
- 1435 The Critic in Church.
- 1436 Victorian Congregational Year Book, 1875.
- 1437 Ho Marturios: or, Great Leading Lives of Scripture and Prophecy.
- 1438 Poems, by the Rev. Dr. Lang.
- 1439 Kendall's Leaves from Australian Forests.
- 1440 Walch's Head Over Heels.
- 1441 Sparks and Sounds from a Colonial Anvil, by J. Whiteman.
- 1442 Jottings by an Australian Abroad, by W. P. Buckhurst.
- 1443 Advice to Persons About to Marry.
- 1444 Newton Goodrick's Poetical Works.
- 1445 Victorian Charades, by J. S. H. Young.
- 1446 The Land: an Essay, by Thos. Carter.
- 1447 Adventures of Martin Cash.
- 1448 Sunshine and Shadow, by E. A. Banks.
- 1449 Memories of the Past, by a Lady in Australia.
- 1450 His Natural Life, by Marcus Clarke.
- 1451 Golden Gifts, by M. J. Franc.
- 1452 Carpeo : a Tragedy, by John Fynamore.
- 1453 Story of Wild Will Enderby, by Vincent Pyke.
- 1454 Shadow of Reality, and other Stories.
- 1455 Victorian Savings Banks, by F. S. Dobson.
- 1456 Australian Story Book, by Cyrus Mason.
- 1457 The Black Gin, and other Poems.
- 1458 The Captives, by H. A. Strong.
- 1459 Roberts' Manual of Dancing : Ballroom Companion.
- 1460 The Explorers, and other Poems, by M. C.
- 1461 Boot and Saddle, by H. Morin Humphries.
- 1462 Summer Dreamings, by Charles F. Taylor.
- 1463 The Peripatetic Philosopher, by Q.
- 1464 Exploration Thoughts, and other Poems.
- 1465 Lessons for the Young, by Henry Harris.
- 1466 Poems and Songs, by Mrs. Harriet Kerr.
- 1467 A Dream of the Past : or, Valerian.

- 1468 False, and other Tales.
- 1469 Holiday Peak, by Marcus Clarke.
- 1470 Pakeha Rambles through Maori Lands.
- 1471 Mysteries of Melbourne Life.
- 1472 The Millenium; an Epic Poem, by E. F. Hughes.
- 1473 The Australian Templar Annual and Directory, 1875.
- 1474 The Australian Musical Magazine.
- 1475 The Week, by H. K. Rusden.
- 1476 A.B.C. Australian Guide.
- 1477 Ich Dien: a Poem, by J. O'Connor.
- 1478 The Man in the Iron Mask: a Poetical Romance, by G. G. McCrae.
- 1479 The Colonial Musical Cabinet.
- 1480 Pamphlets published in Victoria, from 1873 to 1875.
- 1481 Almanacs.
- 1482 Acts and Statutes.
- 1483 *Fragmenta Phytographiæ Australiæ*, contulit Liber, Baro. Ferdinandus de Mueller, 7 vols., morocco.
- 1484 Report of the Secretary for Agriculture, calf.
- 1485 Second Annual Report from the Secretary for Agriculture.
- 1486 Catalogue of Forest Trees, Fruit Trees, Plants, Coniferæ Shrubs, Hardy Trees, &c., cultivated in Victoria.
- 1487 Victorian Pamphlets, published from 1873 to 1875.
- 1488 Victorian Year Book, containing a digest of the statistics of the colony for 1875, by H. H. Hayter, Government statist.
- 1489 Analytical Drawings of Australian Mosses, edited by Ferdinand von Mueller.
- 1490 Catalogue of the Library of the Parliament of Victoria, morocco.
- 1491 Palæontology of Victoria; or, Figures and Descriptions of Victorian Organic Remains, by Fredk. McCoy, morocco.
- 1492 Geological Survey of Victoria; Progress Reports, 1873-74, by R. Brough Smith, morocco.
- 1493 Catalogue of the Melbourne Public Library, morocco.
- 1494 Catalogue of the Casts, Busts, and Reliefs in the Museum of Art at the Melbourne Public Library, morocco.
- 1495 Reports of the University of Melbourne, 1853-1875, morocco.
- 1496 Plants Indigenous to the Colony of Victoria, described by Ferdinand von Mueller, thalamifloræ and lithograms, morocco.
- 1497 Metereological and Magnetical Observations, made at the Flagstaff Observatory, Melbourne, 1858-1863, by George Neumayer, Ph.D., morocco.
- 1498 Meteorological Observations, taken in the Colony of Victoria, 1859-1862, and Nautical Observations, collected and discussed at the Flagstaff Observatory, Melbourne, 1858-1862, by George Neumayer.
- 1499 Victorian Education Act, 1872; and Reports, 1873-1874, calf.
- 1500 Mineral Statistics of Victoria, for year 1873, calf.
- 1501 Reports of the Mining Surveyors and Registrars, 1873-75, calf.
- 1502 Patents and Patentees in Victoria, indexes, 1854-72, calf.
- 1503 Census of Victoria, 1871, half-morocco.
- 1504 Statistics of the Colony of Victoria, 1873, half-morocco.

- 1505 Report of the Royal Commission on the Public Service, and Working of the Civil Service Act, 1873, half-calf.
- 1506 Public Service Reports, 1873-74, half-calf.
- 1507 Collection of Books, printed in Victoria.
- 1508 Annual Reports of the Victorian Board of Education, 1864-71.
- 1509 Description of the Eldorado Gold and Tin Mine.
- 1510 Transactions of the Mining Institute of Victoria.
- 1511 Statistics of the New North Clunes Gold Mining Company.
- 1512 Statistics of the Ilfracombe Iron Mine.
- 1513 Mining Surveyors' and Registrars' Reports, 8 vols.
- 1514 Goldfields and Mineral Statistics.
- 1515 Statistics of the Walhalla Gold Mining Company.
- 1516 Melbourne Directory, 1873.
- 1517 Official Catalogues of the Victorian Intercolonial Exhibition of 1875.
- 1518 The Land Acts of Victoria, 1869 to 1873.

FERRES, JOHN, Government Printer, Melbourne.

Reports and Statistics from the principal Government institutions of Melbourne :—

- 1519 Victorian Hospital for the Insane, 1870-73.
- 1520 Melbourne Public Library, 1870-75.
- 1521 National Museum, Victoria, Mining Catalogue.
- 1522 Melbourne Museum of Art Catalogue.
- 1523 Supreme Court Library Catalogue.
- 1524 Melbourne Public Library Donations.
- 1525 " " " Supplementary Catalogue.
- 1526 " " " Catalogue.
- 1527 Victorian Hospital Reports, 1863-75, 3 volumes.
- 1528 Melbourne Industrial Museum Archives, 1871-72.
- 1529 Victorian Benevolent Asylums Reports, 1873-75.
- 1530 Melbourne Public Library, Catalogue of Oil Paintings.
- 1531 Melbourne Museum of Art.
- 1532 Victorian Newspapers.

WARRNAMBOOL, BOROUGH COUNCIL OF, Warrnambool.

- 1533 Statistics of the Borough of Warrnambool.

INSTITUTIONS AND ORGANISATIONS.

CLASS 313.—Music and the drama.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 1534 Portfolios of Music, by W. H. Glen.

SCIENTIFIC AND PHILOSOPHICAL INSTRUMENTS AND METHODS.

CLASS 327.—Musical instruments and acoustic apparatus.

Percussion instruments, drums, tambourines, cymbals, triangles.

Pianos.

Stringed instruments other than pianos.

Automatic musical instruments, music boxes.

Wind instruments of metal and of wood.

Harmoniums.

Church organs and similar instruments.

Speaking machines.

Vocal music.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1535 Bell and Stand.

KILNER, JOSEPH, Bosisto-street, Richmond.

1536 Pianoforte. Dulciana trichord instrument, full compass, with metal string plates, ivory-fronted keys, with perfect check repeater action, built on the soundest scientific theories, tone dolest. Manufactured entirely from colonial timber.

1537 Pianoforte. Full cottage, trichord throughout, three pedals, full metal plates, extended sound-board of Kauri pine, improved bass bridge, patent perfect repeater, check action, ivory-fronted keys, oval key pins, with the latest improvements. Colonial manufacture.

ENGINEERING, ARCHITECTURE, CHARTS, MAPS, AND GRAPHIC REPRESENTATIONS.

(For Agricultural Engineering, see Class 680.)

(For Mining Engineering, see Class 120.)

CLASS 330.—Topographical maps. Marine and coast charts. Geological maps and sections.

Botanical, agronomical, and other maps, showing the extent and distribution of men, animals, and terrestrial products. Physical maps.

Meteorological maps and bulletins. Telegraphic routes and stations. Railway and route maps. Terrestrial and celestial globes. Relief maps and models of portions of the earth's surface. Profiles of ocean beds and routes of submarine cables.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1538 Maps of the Colony of Victoria.

1539 Map of Coalfield.

SURVEYOR-GENERAL OF VICTORIA, Melbourne.

1540 Maps and Plans of the Colony of Victoria.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 1541 Map of Sandhurst Goldfield.
 - 1542 Map of Ballarat Goldfield.
 - 1543 Statistical Tables—Victoria.
 - 1544 Map of Mitchell River, Gippsland.
 - 1545 Map of Sandhurst Goldfield.
 - 1546 Map of Victoria—Distribution of Forest Trees.
 - 1547 Map of Ballarat Goldfields.
 - 1548 Map of Cape Otway District.
 - 1549 Geological Sketch of Cape Otway.
 - 1550 Map of Victoria.
 - 1551 Map from Mount Alfred to Mount Taylor Creek.
 - 1552 Statistical Tables—Western Australia.
 - 1553 Map of Ballarat Goldfield.
 - 1554 Dandenong State Forest, by M'Donald, St. Kilda.
 - 1555 Map of Ballarat Goldfield.
 - 1556 Map of Ballarat Goldfield.
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PHYSICAL, SOCIAL, AND MORAL CONDITION OF MAN.

[The following Report from the Jury of Department No. 26 of the Melbourne Intercolonial Exhibition is here reprinted, since it contains a *précis* of the present state and condition in Victoria of the various educational, medical, benevolent, charitable institutions, museums and public libraries, the system of penal discipline, and other information relative to the physical, social, and moral condition of man:—]

THE first meeting of the Jury appointed to report upon Department III. was held at the offices of the Exhibition on the 20th August, 1875.

Mr. Henri J. Hart was elected chairman, and Mr. Marcus Clarke and Mr. Pearson were requested to prepare report. The prefatory essay, handed to the Jury as the basis of their report, was read and considered on the 30th of August, and it was resolved that as much additional information as possible should be obtained and handed to the Commissioners.

It was further decided that the Jury should make personal visits of inspection to those public institutions with which any of their number were not personally familiar. The following institutions were at different times personally visited:—

The Pentridge Prison and Reformatory Schools.

The Melbourne Gaol.

The Melbourne Hospital.

The Deaf and Dumb Asylum.

The opinion of the Jury on the government and conduct of these places is expressed under the special headings hereinafter following.

HENRI J. HART, Chairman.

THE MELBOURNE UNIVERSITY.

[FROM INFORMATION FURNISHED BY PROFESSOR PEARSON.]

The University of Melbourne was established by an Act of Council, to which Governor LaTrobe gave the Royal Assent on the 22nd January, 1853. It was opened as an institution in the Exhibition Building, at Melbourne, on the 13th April, 1855. The foundation-stone of the permanent building, which stands in grounds of 40 acres, in the suburb of Carlton, was laid on the 3rd of July, 1854, by Sir Charles Hotham. The permanent building was opened for use 3rd October, 1855.

The government of the University is vested in a Council and a Senate. The Council consists of twenty members, who were originally nominated by the Crown. At present, all vacancies are filled up by election in the Senate. The Council elects a Chancellor and a Vice-Chancellor every year as *ex-officio* chairmen. The Council appoints Professors and Lecturers, confers degrees, and frames statutes, which, if approved of by the Senate, become law. The Senate consists of all graduates of the University. It elects to the Council, and rejects or approves measures sent down to it by the Council for consideration, but has no power to initiate or to alter legislation. There is also a Professorial Board, consisting of the four Professors and of the Dean of the Faculty of Law. The Professorial Board is charged with the maintenance of discipline among the students, and arranges the subjects and times for examinations.

As constituted by Letters Patent, the University of Melbourne resembles Oxford or Cambridge rather than the Scotch or German Universities. It has power to grant degrees in arts, in law, in medicine, and in music; but not in surgery, in engineering, or in divinity. Hitherto no degrees in music have been granted; and there are obvious reasons why divinity should not be taught in the chief school of a colony, where the population is divided between many religious bodies. But the want of power to confer degrees in surgery and engineering is a serious drawback to the usefulness of the University. It will probably be remedied by legislative enactment before long.

Practically there are at present three schools in the University; that of Arts, which includes engineering, under three professors and four lecturers; that of Medicine, under one professor and six lecturers; and the faculty of Law, under a dean and four lecturers. Taking the returns down to the end of 1874, it will be found that eighty-seven students of the University have graduated as bachelors of arts; twenty-two as bachelors of medicine; and twenty-six as bachelors of law. The first degrees in arts were conferred in 1858; the first in medicine, in 1862; and the first in law, in 1865. Sixteen students entered it the first year of the University; seven in 1856; and as many in 1857; while only two were enrolled in 1858. But in 1859 the numbers had risen to thirteen, and in 1863 to fifty-six. Last year, the numbers were 159; and this year they are understood to be about 180. It is a matter of some interest to compare these results with those obtained in

other countries. Victoria, it will be seen, has one student to every 4500 of the population. In Europe the proportion stands thus:

Scotland	...	...	...	...	1 to 1000
France	...	...	...	...	1 to 1650
Denmark	...	...	...	...	1 to 1800
Sweden	...	...	...	...	1 to 2350
Germany, including Austria	...	...	...	...	1 to 2600
England	...	...	...	...	1 to 5800

The proportion in Scotland is no doubt raised by the large number of divinity students, and it is reduced in Germany by the great number absorbed into the army. But if Victoria is below the level of the best educated countries in Europe, it is above that of England. This result is the more gratifying, as there is no doubt that the staff of teachers at Melbourne is numerically far below the minimum of any European University. Thus, at Berlin there are 153 teachers; at Copenhagen, 50; 31 at Leyden; and the same number at Christiania; while even the University of Athens has 53. We may probably assume, therefore, that the present teaching is attractive and efficient; and that if the staff of teachers were increased, degrees in surgery and engineering instituted, and the fees reduced to the average of Scotland or Germany, the number of students in the highest State school would rise proportionately.

The income of the University of Melbourne is derived from a State grant of £9000 a year, and from fees and other trifling sources which bring in about £5000 more. Of this sum, more than £9000 goes to the salaries of professors and examiners, and about £700 to scholarships and prizes. The rest is absorbed by various expenses, the most onerous of which is the keeping up of the University grounds. These have cost more than £13,000, besides the ordinary expenses of maintenance, which vary between £500 and £700 a year.

Besides the ordinary academical work of lecturing to and examining matriculated students of the University, the professors conduct two yearly examinations which are known as matriculation examinations, but which really correspond to those known as middle-class examinations in England, and are intended to test the schools of the colony. Candidates in these are required to pass in six subjects out of nine for matriculation, and in four out of nine to be eligible for the Civil Service of Victoria. The nine subjects out of which a candidate may select are Greek, Latin, French or German, English, history, geography, arithmetic, algebra, and Euclid. Candidates for the Civil Service are obliged to take up English and Arithmetic. The number of candidates offering themselves has varied of late years between 450 and 600.

THE PUBLIC LIBRARY.

[BY MARCUS CLARKE, ESQ.]

THE TRUSTEES.

The Trustees appointed by His Excellency Charles Joseph LaTrobe, C.B., by proclamation in the *Government Gazette* of the 20th July, 1853, were:—

The Honourable William Foster Stawell, Esq., Attorney-General, now Sir William Foster Stawell, Chief Justice of the Supreme Court.

The Honourable James Frederick Palmer, Esq., Speaker of the House of Assembly, afterwards Sir James Frederick Palmer, for many years President of the Legislative Council, and now deceased.

The Honourable Hugh Culling Eardly Childers, Esq., now Member of Parliament for Pontefract, England.

His Honour Mr. Justice Barry, senior Puisne Judge of the Supreme Court, now Sir Redmond Barry.

David Charteris Macarthur, Esq.

And by proclamation of the 4th September, 1863—

The Honourable Sir Francis Murphy, Speaker of the Legislative Assembly, in the room of Mr. Childers, resigned.

Immediately after their appointment, the five first-named Trustees entered on their duties; a sum of £10,000 for the building was voted by Parliament, and a grant of land, comprising two acres, as a site for a building was made to them. This land they enclosed, the borders were trenched, and the soil was enriched and planted with standard forest trees and ornamental flowering shrubs.

Designs for the building were called for without loss of time, and from many highly creditable to the competing architects, one by Mr. Reed was selected, the chief excellences of which consisted in the becoming exterior features, the convenient internal accommodation, and the possibility of enlargement in portions, not demanding at one time any very considerable outlay, capable of being erected without obstruction to the use and enjoyment of the remainder.

The foundation-stone of this was laid by His Excellency Sir Charles Hotham, on the 3rd of July, 1853, the same day as that upon which was laid the first stone of the University of Melbourne.

An outlay of seventy-three thousand three hundred pounds, expended in additions to the original centre block, has brought the building to its present dimensions.

THE BUILDING.

The building of the Library proper, at present completed, forms only a portion of the western front. The structure is of solid masonry, the material used for the ends, back, and interior dividing walls is basalt, a dense compact stone of a blue colour; for the front, a handsome free-stone, imported from Kangaroo Point, near Hobart Town, in Tasmania. It stands on a broad terrace, reached by two successive flights of steps and two broad landing places, at a distance of 120 feet from Swanston-street, one of the finest thoroughfares in Melbourne, and, like the other principal streets, ninety-nine feet wide. It is carried out in the Romano-Corinthian style of architecture, the columns and pillars placed in stylobate, and surmounted by a parapet partly of moulded panellings and partly of balusters, the height from the ground to the top of the parapet being 52 feet.

On the ground floor is an entrance hall 50 x 50 ft. Large pillars support the first floor. On the south side are apartments used as temporary offices, and a room 55 x 50 ft., in which are placed coins, seals, medals, and illustrations of various branches of the Fine Arts, together with ethnotypical objects, chiefly from Australasia and the South Sea Islands. On the north is a chamber 95 x 50 ft., in which are placed casts of modern statues and busts. On the first floor are three chambers—a central chamber 50 x 50 ft., the southern and northern, each 95 x 50 ft., not separated from each other by doors or partitions. The reading room is thus 240 ft. long, 50 ft. wide, and 30 ft. high. The gallery running round the room is supported by cross walls, at right angles to the main walls, connected with columns which stand at a distance of 13 ft. from the latter, and support the roof. A clear space of 25 ft., is left in the centre of the room, and in the intercolumnar recesses books are placed back to back behind the columns, dividing the whole room into 26 open compartments 13 ft. high. In the gallery the books are ranged against the outer walls, the thickness of which and of the backs of the cases, made of $\frac{1}{2}$ -inch timber, guards sufficiently against damp. Books of large size are placed in cases against the balusters of the gallery. Light is admitted by windows in the front and rear, 9 x 4 ft., one in each compartment, as well as by cupolas in the roof, glazed with bent glass—the glass bent in Melbourne—and by horizontal windows, countersunk in perforated panels in the galleries. At night the rooms are lighted by seven handsome gasaliers suspended from the ceiling in the centre with eight globes, each of strong illuminating power. In every compartment or bay are also two gas jets. In addition to the air introduced through the windows, ventilation is secured by open spaces left over every bookcase, communicating with flues carried through the main walls; also by air tubes leading from the base of the columns to the roof. These precautions secure in the reading-room a pure atmosphere and nearly equable temperature which may be regulated even when the number of readers exceeds 600. The free circulation of pure air prevents the gas from producing any of the injurious effects on the leather binding or gilding of the books, so serious a cause of complaint in libraries in Europe, where due attention has not been bestowed on this matter. In this particular, strong corroboration is given to the testimony of the scientific men—Faraday, Hoffmann, Tyndall, Redgrave, Fowke—who reported to the Lords of the Privy Council, in 1859, on the subject.

In the year 1866, on the occasion of the holding in Melbourne of the Intercolonial Exhibition, advantage was taken of the central position of the Library to meet the wants of the time, and additions were made to the building, completing in part the first square—according to the original design—carried up to the first story. This gives a Great Hall running parallel to the Library, 220 ft. long, by 82 ft. wide, and 48 ft. high, now used as an Industrial and Technological Museum. It is connected with the Library by two wings, each 230 ft. long, one of which now serves the purpose of a temporary Picture Gallery, while in the other are casts of the Frieze of Parthenon obtained from the British Museum, as also casts of antique statues. Between the Great Hall and

the Library, connecting the two, is a Rotunda 71 ft. in diameter, intended for the great staircase to conduct visitors to the Library and Gallery of the Museums. The foundations and walls of the Great Hall, of the Rotunda, and the back walls of the wings carried up to the first floor, are of the thickness intended for the permanent building. The upper story and roof are of temporary work, as are also the exterior walls of the wings, the material of which walls may at a future time be employed in raising the back walls to their contemplated height, when they will be replaced by others of solid masonry, repeating the architectural features of the western wing. The interior courts are available for the disposal of large rough objects connected with those to be placed in the Hall. In the years 1869-1870 the Portico was added, corresponding in style with the rest of the structure, and of the purest type. It is octo-style, with inter-columniations of two diameters. The columns, which are fluted, with carved capitals and modillions, stand on pedestals 6 ft. 6 in. high, of the same height as the stylobate which surrounds the building. They are 3 ft. in diameter, and 30 ft. high. The entablature is surmounted by a pediment of 7 ft. 6 in. in height. The front columns of the two end bays stand 12 ft. 6 in. from the corresponding pilasters of the main wall. The space behind the five centre bays is of the depth of 18 ft. The total height from the bottom of the stylobate to the apex of the pediment is 56 ft. 6 in. The primitive name of the institution is carved on the frieze, and it is intended to fill the tympanum of the pediment with sculpture. The piers of the attic at the back of, and flanking the pediment, and also the principal piers of the parapet, are to be adorned with appropriate statues.

THE FURNITURE.

In the reading rooms, the fittings and furniture have been designed and carried out with regard to the architectural features of the interior. They are made of cedar—a timber indigenous to New South Wales, resembling mahogany in grain and colour—and are of the best workmanship. One table is placed in the central chamber, capable of accommodating ten readers; three run down the middle of each wing, giving room for 100 persons; tables in the recesses receive about 250; side, and other tables, including those in the ladies' room, about 100 more; and those in the galleries, about 200; so that about 650 readers can be provided at the same time with seats and the opportunity of study without inconvenience, crowding or interruption. It may be here remarked, that after the constant use to which it has been exposed the furniture remains in excellent preservation, and has not suffered from ill usage of any kind.

THE BOOKS.

The Library is constructed so as to meet the wants of casual readers as well as of those who pursue continuous studies; it is, therefore, at the same time, a place for the deposit of books, and for the assemblage of readers. The latter are allowed to help themselves to the books they want, instead of being, as in most other libraries, supplied with them by

the officers of the establishment, on a requisition in writing more or less complicated. The impediments thereby caused to the enjoyable satisfactory and uninterrupted pursuit of any study are thus avoided, and the expenses of maintaining a staff of officers to carry out such a plan, with so large a number of readers as visit this Library, is much diminished. In order to obviate many of the difficulties which in some libraries can be surmounted only by officers long trained to know the position of the books on the shelves, a classification according to subjects was adopted by the first librarian, Mr. Tulk. The system is inductive, leading from works which treat of the lowest organisations of animal life, to those dealing with the highest form of speculation. The books are distributed in open chambers or recesses, each capable of containing about 2000 volumes. In those on the west side of the room are found works relating to the distinct departments of Science, Geography, Mathematics, Arts, and Manufactures; on the other, the east, books on History and General Literature, in all languages. This arrangement has proved convenient alike to students and occasional readers, and to the officers of the establishment. General visitors are dispersed through the rooms, and attracted to the special compartments in which are placed the works they respectively desire. The student finds brought together on the spot all the works bearing on the subject of his inquiry, and as the books may be referred to or read, as already observed, without any restraint on the reader, in or near the subdivision where they are deposited, the constant walking to and fro of the visitors and attendants so fatal to comfortable study in some libraries, does not occur.

In a collection so varied it is to be expected that books of different sizes are to be found; still the majority are octavos, and this form has in all instances been preferred where it has been possible to procure books published of that size, due regard being paid to procure the best editions. The upper carcasses of the cases are expressly made to hold such books, the lower portions for folios and quartos. For tall copies and large folios—chiefly illustrative of voyages and travels, natural history and botany, medicine and surgery, architecture and the arts—room is provided in the galleries, in cases specially adapted for that purpose. Over each case in the recesses is placed a panel having printed on it in large gold letters the nature of the works in the compartment, and small labels with similar indications as to subdivisions of the main subject are attached to the various shelves or divisions of them where necessary. In the galleries are the publications of the Imperial Patent Office of Great Britain, comprised in 3161 volumes. Also the Votes and Proceedings of the Imperial Parliament from the year 1820, consisting of 1471 volumes, and works from all the departments of the Public Service of Great Britain, including those published by the Record Commission and the Master of the Rolls, numbering 325 volumes. On the south side of the galleries are placed works on medicine and surgery, accompanied by anatomical diagrams of life size printed and coloured, accessible to members of the medical profession and students, on application to the librarian or sub-librarian. At the

north end works on law, including all the reports in all the superior courts of law and equity, accessible to members of the profession and students without any such restriction as last mentioned. Works of general polity, commercial, statistical, banking, and politico-economic literature, are also grouped in the galleries, as well as the statutes and proceedings of the Legislatures of many of the colonies of the British Empire; also some of the States of Europe, and the United States of America—Government Gazettes and State Papers. Close to these are ranged publications relating to Australasia which have emanated from the press of the various Australian colonies, as also from that of Great Britain, and most of the countries of Continental Europe. Great pains have been taken to render this collection as comprehensive as possible, and to bring it up to the latest date. It consists of 1586 volumes, containing in almost all instances several pamphlets in each volume, classified under the heads of the different colonies. These, with the papers printed by authority, and the Australian newspapers mentioned in the schedule, furnish copious material for the history of Australia when it may be written. In the immediate neighbourhood of these works are placed all the maps issued by the Survey office, showing all the subdivisions of the lands of Victoria from the earliest times, as also a large portion of those of New South Wales, Tasmania, South Australia, Western Australia, and Queensland. These are bound in volumes, and indexed. With their aid, and that of the maps of the Geological Survey of Victoria, as far as they extend, information respecting the topographical and physical features of any lands sold by the Crown in Victoria can be speedily obtained. Various Atlases, and series of maps bound in volumes, or mounted and hung on the walls for general reference, are also to be found in the galleries, and in the newspaper compartment.

With the exception of donations and books bought in Melbourne, every book has been ordered by name, and in their directions to the booksellers with whom they deal in London, Paris, Berlin, Brussels, and Amsterdam, the Trustees have been much influenced by the existence in Melbourne of three other libraries, with the management of one or other of which they have had the honour of being also connected. Two of these, that of Parliament and of the University, although exclusive as to the admission of readers, partake somewhat of a national character, being formed and maintained out of the public funds; the third, that of the Supreme Court, supported wholly by fees paid by practitioners in the law, is strictly professional. The first of these contains chiefly works on constitutional history, polity, statistics, and the allied subjects. The second, classics ancient and modern, science, natural philosophy, natural history, and those which treat of the various topics connected with education. The third is confined to law, history and general jurisprudence. While during the first years of their foundation the endeavour was to keep each of those three as closely as might well be within the limits of its especial intention, viz., to supply the particular and technical information required by the statesman, the student, and the practising lawyer, the efforts of the Trustees were

directed to make the resources of the Public Library supplemental to those, in order to avoid the needless multiplication of copies of the same book. They procured at first only the leading authorities on the particular branches of learning provided for in them, the common sources of reference for readers of all classes, without which no library could be complete. They filled in on a liberal scale all the most approved authorities on other professional and scientific branches of occupation, and provided largely for all which bear upon discoveries in physical science and the practical arts, and which help to unfold the natural and artificial resources of the country. These primary wants having received the earliest and most ample consideration, fed by the continuous current of the latest publications, the Trustees have been enabled to diverge into other directions, to bridge over the interspaces, to connect the links in the chain, and so to balance the supply as to leave no class of literature wholly unrepresented. The result is, that the aggregate contents of the four libraries, give probably no more than 15,000 *replicas* of the same authors. It is somewhat difficult to convey by this merely classified enumeration the prevailing character of the literature. It may, perhaps, be best comprehended by negatives. Works usually classed as works of fiction and imagination, and those which in some catalogues are entered under the head of "literature for juveniles," are not represented in this library to any considerable extent; in fact, do not exceed 300 volumes. Books of injurious tendency are not displayed here. Those of a purely ephemeral description and of transient value, mere literary curiosities or rarities, expensive manuscripts, those simply recommended by their sumptuous binding or illustration, have hitherto been set aside for those which commend themselves for their substantial merit and sterling value. Nevertheless, special subjects have not escaped due notice, and the taste of those who cultivate peculiar departments of science and literature has been consulted. Attention is therefore called merely to such works as the Abbé Migne's Repertorium of 1300 writers in Patristic Theology, and History in 326 volumes; the Bollandist Acta Sanctorum, in 56 volumes; Audubon and Gould on the Birds and Fauna of America and Australia, the first published in 4 volumes of elephant folio, the other in 7 volumes large folio; Silvestre's Palæographie, in 4 volumes, folio; Denon, 2 volumes in double elephant; and Lepsius' Egypt, in 12 volumes, elephant folio; Grevius and Gronovius Thesaurus, 82 volumes, folio; Litta's Italian Families, 8 volumes, folio; Pertz's Mediæval German History, 18 volumes, folio; the *Times*, from the year 1807; the galleries of Dresden, Versailles, Florence, Naples, Il Vaticano, British Museum, &c., &c.; a complete series of most of the publications of the literary clubs in Europe; with several hundred volumes of the like consequence and importance, usually found only in the hands of those who with unstinted wealth encourage the prosecution of some favourite study, or on the shelves of libraries of the first order in old long-established cities. These have been assiduously followed up by an ample accession of kindred works on the same and cognate subjects—regard for the quality of literature, not the number of the books being the dominant

rule—and the intelligent visitor will admit that due respect has been paid to the obligation by which the Trustees consider themselves bound, namely, that it was their duty to lay broad and deep the foundations on which was to be built up a superstructure of sound learning in this Institution.

THE CATALOGUES.

Care has been taken to supply adequate information to readers by furnishing catalogues of the contents of the Library. A general catalogue was published in the year 1862, and contained a list of all the works then in the possession of the Trustees. The increase of books was so rapid about that time that it became necessary to publish a supplementary catalogue in the year 1866. The large additions made since that time render it imperatively necessary that a new edition, comprising all now in the Library, should be printed. The name of each author is given, with his Christian name or names at full length when known; and the edition, size, number of volumes, place and date of publication follow. If there be more than one work by the same writer, they are placed in chronological succession of their issue from the press. At the end is an index of subjects in which the names of the authors who have written in each branch of literature, science, or art, are supplied. Thus the strength and resources of the Library in any one such branch up to the dates of their respective publications can be immediately ascertained. There is also in each recess a catalogue *raisonné* kept in manuscript, and written up to the latest date, with the like alphabetical and descriptive enumeration of the works there. These, with the plans of distribution of the books hung up in several places, the printed announcements, and the tablets on the shelves to which allusion has been already made, furnish a full account of the contents of each recess.

THE BINDING.

The binding is strong and serviceable, but not costly; full binding in leather preponderates, half-binding is used for long series of books of reference; the work has been executed in the best manner in London, Paris, Berlin, Brussels, and Melbourne; and that of the Melbourne binders compares not unfavourably, both as to price and quality, with that executed in the former capitals. The books are armed on the side with the device of the Library and the motto

“Delectant domi non impediunt foris peregrinantur;”

on those of the lending library the word

“Rusticantur”

is added. A bookbinder is constantly employed on the premises, and any book which has suffered injury is immediately repaired. The gilding on the back of the books has been by some persons considered an unnecessary expense. When examined, the objection is in itself of little moment, for the additional cost is trifling. It is moreover the fact that greater attention is paid by the binder to the kind of material

used, and the durability of the workmanship expended on the binding of the superior description than of the common class. Gilding, moreover, preserves the leather from the effects of the sun's rays, as well as from the attacks of insects, an important consideration in this climate. The experience of fourteen years has proved that the books most expensively bound have lasted well, and are still in good condition; while those in common cheap covers, especially those bound in Germany, submitted to a similar amount of use, have been repaired, and, in some instances, three times re-bound. The style of binding has, furthermore, its uses, social as well as practical. The readers appear to have more interest in, pay more respect to, and take more care of, a book somewhat handsomely bound than of one in a cloth cover, which retains dust, warps, and soon loses its shape. A volume of becoming exterior, in unison with the features and fittings of the room, brings them, as it were, nearer to the presence of the author, than one hardly held together by its cover, dog-eared, and defiled by pencil marks or notes of frivolous commentators, who are prone to take liberties with a book in a dilapidated state which they would not presume to do with one in good preservation. This feeling communicates itself to others, and helps to generate a tone of respectful behaviour which marks in a conspicuous manner those who habitually resort to the Library. Lettering pieces on the backs of the books of different coloured leather, according to the nature of the subject, give a distinctive characteristic to each class of literature. This helps the eye of the reader in search of his author, and the attendants in their adjustment of the books on the shelves. A volume misplaced may thus be instantly detected by even an illiterate person. Holland blinds, hung on rollers, drawn down while the rooms and furniture are being cleaned and when the books are not in use, preserve them effectually from sunlight, gaslight, and dust. A stock book is kept, in which is entered as received—after it has been duly collated—the name of every book, with particulars (shown in the schedule annexed), and the secret mark by which it can be identified, though stripped of its binding and altered completely in outward appearance. The booksellers are directed to make out their invoices in the same form (also shown) as that in which the books ordered appear, and thus the information furnished by them affords a ready test as to compliance with the directions sent. For the periodical literature and serials another form is used. From the series of schedules given, it will be seen that the literary resources at command bear a very respectable relative proportion to the population. Other tables give the statistics of libraries in Europe and America. There is no desire to court any comparison unduly flattering to Victoria or disparaging to any other country. The sole object is to show that our fellow-countrymen appear to be fully impressed with one of the most important responsibilities attendant on prosperity and the acquisition of riches—namely, the necessity for a liberal support of those institutions which help to teach the true value of wealth; and that they recognise the truths enforced by the history of all ages that the greatest dangers to freedom arise from the prevalence of ignorance and vice, and that provision must be made for the cultivation and

expansion of the public mind, according as it becomes charged with the exercise of political privileges.

DONATIONS.

The donations are so numerous and form so notable a feature as to claim especial mention, and to demand this public acknowledgment of the gratitude of the Trustees, in addition to that already more particularly expressed. Of these many are of the highest order of literary and scientific merit, many of a class and of an expensive character which the resources at the command of the Trustees would not have enabled them to purchase. Many are not procurable otherwise than through the munificence of the Sovereigns of several of the States of Europe, or the courtesy of different departments of the public service of the United Kingdom and of foreign countries. To the liberality of several literary and scientific societies and of private individuals, the Trustees are also largely indebted, as well as to the courteous and assiduous intermediation of the Consuls of the different foreign countries. The Imperial Geological Society of Austria has forwarded a large body of scientific productions of great practical usefulness, in addition to one previously given by it and by the Imperial Geographical Society. The Royal Society of Northern Antiquarians of Denmark have, through the instrumentality of the distinguished historian Rafn, sent from Copenhagen a rare and curious set of chronicles connected with the history of the nations of the north of Europe, including a complete series of Icelandic Sagas, compiled and published under the supervision of the Arnæen Magnœan Society, and under the auspices of the Danish Government. And to the University of Copenhagen the Trustees are beholden for help heartily given. The assistance afforded by the British Government has admitted of the amplification of some branches of civil history, polity, and political science, the defective condition of which in the Library had been felt by the public. The Lords of the Treasury, the War Office, the Ordnance, the Admiralty, furnished an extensive supply of military and naval history, surveys, maps, and charts in which the Library had been for some time deficient. The Boards of Trade and Education gave a comprehensive series of their publications; the Commissioners of Patents, the whole of their specifications published since the reign of King James the First. These publications are of incalculable value in a country where, as this is, it is so necessary to economise labour, and where inventive genius, ever active, requires to be instructed as to the failure of misdirected energy and the limits of discovery already reached; they are brought down, bound, to the end of the year 1869. The plans placed at the end of the letter-press are all backed on strong linen, well let in to the backs of the books, more than 40,000 yards of this material having been employed by the binders. The country already possesses two complete sets of this work; one lies in the library of the Houses of Parliament, neither arranged nor bound, and accessible only to those who enjoy the exclusive privilege of membership; the other in the office of Patents, for the sole use of the officers of that department; so that the com-

munity at large derive comparatively little benefit primarily from the liberality of the Commissioners. In this Library, brought down to so late a date, the public in general have opportunities of unrestricted consultation of the whole series, and such publicity is given to the results of speculative invention in the mother country, as to preclude the possibility of successful plagiarism or piracy of the protected ideas of others. The Trustees of the British Museum have presented all the books issued by their authority, including a fac-simile of the Old Testament from the Alexandrine Codex, in 6 vols. folio. From the Foreign Office was received a collection of papers not otherwise obtainable. To the Chairman of Committees of the House of Lords, and the Speaker of the House of Commons, the Trustees owe the Votes and Proceedings of both Houses of Parliament; and to the Master of the Rolls, the voluminous labours of the Record Commission and the Rolls publications.

THE LENDING LIBRARY.

The Lending Library is conducted on a system different from that in common use elsewhere. No single volumes are lent out; thus the heavy charges of supplying numerous copies of the same work, the expense and trouble of daily issuing, receiving, checking, and collating the books, the onerous and invidious references as to the respectability of the borrowers, the requisitions and guarantees, the inconvenience arising from detention and loss of volumes, and consequent irksome necessity for enforcing fines and compensation, are all avoided. Books, in numbers varying from 100 to 200, or 300, are lent to Public Libraries, Mechanics' Institutes, or Athenæums, for periods extending over three, four, or six months, with further extension of time if required, on the conditions given below. They are packed in cases of oak, bound with brass, lined with green baize; the shelves are of such depth that the books are not allowed to suffer from friction in travelling. Each case contains about fifty volumes, the weight on an average about 112 lbs., and having strong handles at each side is raised without much difficulty by one man. It is closed with a sliding door, on the inside of which is a list of the contents, with the value of each volume, and a printed form of the conditions of the loan. Each case is covered with a waterproof tarpaulin, to protect it when on its journey. When placed back to back on a table or one on the other and the doors are removed, they serve as open bookcases, and there is consequently no necessity to remove the books from them and place them on other shelves. The books thus lent are duplicates of those in the General Library, selected with due reference to the ordinary collections generally found to exist in the Institutions to which these loans are made. When a series of lectures is about to be given at any Literary Institution in the interior of the country, one or more cases containing works on the subject to be illustrated can be supplied. Assistance is thus afforded to the lecturer and the members of his class or audience, who can pursue at their leisure the study of the works to which they have been referred. Loans have been made to the institutions enumerated, and the committees of many others have expressed a strong anxiety to avail themselves of the

privilege of borrowing, but have been deterred by the expense and risk of carriage (especially in winter) to great distances in quarters to which railways have not yet been extended. The area over which the system has been carried out as yet embraces a population of about 130,000, and has afforded to persons who frequent the local establishments means of participating in the advantages offered by this institution. Four thousand nine hundred and sixty-six volumes (4,966 volumes) have been circulated amongst the inhabitants of 18 towns, giving to each town the use of from 800 to 1,600 in the course of one year, and thus multiplying the use of each individual volume five or six fold. The plan is capable of still further expansion, at a cost trifling in comparison with the amount of benefit conferred on those resident in remote parts of the country. It is calculated to increase the interest felt in the welfare of this institution, to improve the relations between it and those in the interior, and to lead, it is hoped, at no distant time, to the association with it of these bodies as colleges of adults, affiliated to a voluntary university of adults. It furnishes, moreover, one of the most effectual modes of silencing the common objection as to the propensity to concentrate and centralise the enjoyments of intellectual culture in the metropolis, at the expense of the provinces.

THE MUSEUMS AND GALLERIES.

At the time of the foundation of the Institution, the projected plan included, with the Library, a Museum of Fine Arts and a Picture Gallery, to which would be eventually added a Drawing School and a School of Design. The intention was to trace the outline of a scheme of general instruction by which the chief epochs of mental pre-eminence might be strongly defined, the relative modifications of thought, power of conception and demonstration, peculiarity of method of treatment, and distinctive excellence of execution might be displayed, and a new stimulus be given to the cultivation of the intellect, and the elevation of the public taste. The proximity of the various objects would, as it was considered, attract to them an observation more prolonged and instructive than that bestowed during visits to isolated buildings in which they might be dispersed, and would create and promote a sympathy between the different branches of Literature, Science, and Art, the continuity of which would not be so adequately maintained were the illustrations deposited in different places; while the repeated and associated impressions thus produced would assist in furthering the design, and effectually advancing the general interests of learning. A portion of land containing two acres, abutting on Russell-street, and adjoining that on which the Library stands, was granted to the Trustees for the purpose of building upon it Museums of Natural History, Natural and Applied Science, and to illustrate the application of the Industrial Arts. The expenditure of £32,531 16s. 6d., voted for building, and for the fitting and filling with its valuable contents, the National Museum in the grounds of the University, now by the Act of Incorporation vested in the Trustees of the Library, effectually prevented the progress of the museums projected for this site especially allotted to them. The want of space to display pictures to advan-

the Trustees for several years; but as the entrance hall, with the chambers on the ground floor of the west wing, admitted of the introduction of works of another class, they resolved to commence by exhibiting in them representations of sculpture, and other objects of art. In the arrangement of the former it was proposed to adopt a definite plan, and to illustrate the historical development of the art of sculpture commencing with types of the most remarkable, brought from Nineveh, Egypt, and Etruria; proceeding thence through the Grecian and Græco-Roman schools, those of the earliest mediæval and later Italian eras, to modern times. This project the liberality of Parliament fortunately enabled them to carry out, and they accordingly obtained from England, Rome, and elsewhere, casts of some of the choicest figures, groups, busts, alti and bassi relievi, by the most celebrated sculptors, ancient and modern; as also a collection of coins and medals, with various illustrations in carving, moulding, chasing, and inlaying—some in the true metal, some in a baser material, electrotyped to imitate the original, others in sulphur, wax, or composition—from different parts of the world. To this collection additions estimated to amount in value to more than £2300 were made from time to time by the liberality of various donors.

SCHEDULE I.—PUBLIC LIBRARY, MELBOURNE (FOUNDED 1853).

Volumes.	Moneys voted for the purchase of Books.			Hours open.	Population	Visitors during Eleven Months.*	Terms of Admission.	How supported.
57,370	In 1853 ...	£ 3,000	s. 0	d. 0	In 1869 Victoria contained 710,878 inhabitants; Melbourne proper, 50,500; Melbourne and its suburbs, 182,819.	In 1856 ... 23,769	Free. Use of books free.	By Vote of Parliament.
	1854 ...	3,000	0	0		1857 ... 42,226		
	1855 ...	3,000	0	0		1858 ... 77,925		
	1856 ...	3,000	0	0		1859 ... 127,887		
	1857 ...	5,000	0	0		1860 ... 162,115		
	1858 ...	5,000	0	0		1861 ... 161,221		
	1859 ...	5,000	0	0		1862 ... 202,037		
	1860 ...	2,000	0	0		1863 ... 196,215		
	1861 ...	3,000	0	0		1864 ... 179,787		
	1862 ...	3,000	0	0		1865 ... 207,754		
	1863 ...	3,500	0	0		1866 ... 215,305		
	1864 ...	2,000	0	0		1867 ... 197,525		
	1865 ...	2,000	0	0		1868 ... 200,495		
	1866 ...	3,000	0	0		1869 ... 122,480		
	1867 ...	2,500	0	0				
	1868 ...	2,500	0	0				
	1869 ...	3,250	0	0				
		£53,750	0	0				
	Of which lapsed ...	6,214	11	4				
	Leaving	£47,535	8	8				

* The Library is closed for about one month in each year, for cleaning, taking stock, &c.

SCHEDULE II.—PARLIAMENTARY LIBRARY, MELBOURNE (FOUNDED 1852).

Volumes.	Moneys Voted.	Terms of Admission.	Hours Open.
Arts and Sciences ... 4,703	In 1852 ... £525	Membership of either House of the Legislature, or of the Executive Council.	9 a.m. to 4 p.m., and during the sitting of Parliament, until the adjournment of the Houses.
Archæology and Chronology, &c. ... 251	1853 ... 1,200		
Biography and History ... 4,972	1854 ... 2,200		
Geography and Topography ... 2,646	1855 ... 500		
Government and Polity ... 2,527	1856 ... 1,000		
Jurisprudence ... 2,044	1857 ... 3,200		
State and Parliamentary Papers ... 7,061	1858 ... 3,000		
Theology ... 871	1859 ... 2,000		
Literature ... 9,804	1860 ... 2,000		
	1861 ... 3,000		
	1862 ... —		
	1863 ... 1,000		
	1864 ... 1,000		
	1865 ... 1,000		
	1866 ... 1,000		
	1867 ... 1,000		
	1868 ... 1,000		
	1869 ... 1,000		
34,879	£25,625		

SCHEDULE III.—LIBRARY OF SUPREME COURT, MELBOURNE (FOUNDED 1854).

Volumes.	Moneys expended.	Terms of Admission.	Hours open.	How supported.
In Melbourne... 8,931	In 1853 ... £ 400 s. 0 d. 0	Free to all Members of the Legal Profession.	From 9 a.m. to 4 p.m., or until the Court rises.	By fees received on admission to practice from Members of the Profession, and Students in Law on enrolment.
„ Insolvent Court ... 117	1854 ... 525 15 0			
Branches in Circuit Towns visited by Judges of the Supreme Court—	1855 ... 663 12 6			
Ararat ... 93	1856 ... 143 0 0			
Ballarat ... 163	1857 ... 441 17 4			
Beechworth... 195	1858 ... 208 5 11			
Belfast ... 92	1859 ... 970 1 3			
Castlemaine ... 282	1860 ... 414 19 6			
Geelong ... 168	1861 ... 455 6 0			
Maryborough ... 93	1862 ... 427 9 9			
Sale ... 60	1863 ... 1,760 17 4			
Sandhurst ... 260	1864 ... 340 3 11			
	1865 ... 738 7 3			
	1866 ... 179 17 2			
	1867 ... 243 19 2			
Total ... 10,454	1868 ... 108 11 1			
	1869 ... 101 2 0			
	£8,123 5 2			
	Binding ... 598 16 8			
	£8,722 1 10			

SCHEDULE IV.—LIBRARY OF MELBOURNE UNIVERSITY
(FOUNDED 3RD JULY, 1854).

Volumes.	Moneys expended.	Hours open.	Terms of Admission.	How supported.
	£ s. d.			
Classical authors... 1,070	In 1854 ... 3,150 0 0	From 10 a.m. to 5 p.m.	Being a Graduate or Undergraduate of the University.	By funds voted annually by the Council out of the Endowment.
Engineering and Architecture ... 31	1855 ... 25 9 0			
English and Logic 407	1856 ... 228 6 10			
History and Polity 1,108	1857 ... 43 18 6			
Law 510	1858 ... 51 12 0			
Parliamentary ... 922	1859 ... 559 12 6			
Philology 421	1860 ... 103 15 5			
Mathematical and	1861 ... 363 3 0			
Physical Science 1,289	1862 ... 637 11 6			
Medical School ... 903	1863 ... 224 17 6			
Natural Science ... 2,543	1864 ... 380 6 1			
Miscellaneous ... 414	1865 ... 844 7 0			
	1866 ... 183 6 8			
	1867 ... 286 7 6			
Total 9,618	1868 ... 210 18 9			
	1869 ... 112 12 9			
	£7,406 5 0			

SCHEDULE V.—MELBOURNE ATHENÆUM, MELBOURNE (FOUNDED 1840).

Volumes.	Hours Open.	Visitors.	Terms of Admission.	How Supported.
11,760	8 a.m. to 10 p.m.	34,540	Membership.	Subscription fees.

SCHEDULE VI.—LIBRARY OF THE MEDICAL SOCIETY OF VICTORIA, MELBOURNE.

Founded.	Volumes.	Hours Open.	Visitors.	Terms of Admission.	How Supported.
In 1846. The date of the formation of the Port Phillip Medical Association, which, in 1853, amalgamated with the Medico-Chirurgical Society, and became the Medical Society of Victoria	300. About 100 of these are unbound periodicals.	Open all hours for members of the Society.	There is no rule relating to visitors, but the understanding, based upon usage, is that members may admit visitors.	Payment of subscriptions to the Medical Society of Victoria, <i>i.e.</i> , £1 1s. per annum.	By the fund raised by the subscriptions of the members of the Society, and by occasional presentations.

SCHEDULE VII.—LIBRARY OF THE ROYAL SOCIETY OF VICTORIA, MELBOURNE.

Founded.	Volumes.	Hours open.	Visitors.	Terms of Admission.	How supported.
August, 1854.	550	Accessible at any time, the key being kept at the lodge; but the hall is not kept open save during the meetings of the Society.	Members may admit friends, and any person may consult the books by applying to the President.	Membership, the subscription fee being £2 2s. per annum.	By the subscriptions of members. It consists chiefly of exchanges received from other kindred societies.

SCHECULE VIII.—LIBRARY OF THE LAW INSTITUTE, MELBOURNE.

Founded.	Volumes.	Hours open.	Terms of Admission.	How supported.
1861	527	10 a.m. to 4 p.m.	Membership	Annual subscriptions of members.

SCHEDULE IX.—RETURN OF EIGHT FREE LIBRARIES IN GREAT BRITAIN.*

When opened.	Name of Town.	Population of Town, Census 1861.	No. of Vols. up to 1868.	No. of Issues.
April 1861 ...	Birmingham ...	296,076	51,322	44,633
October 12 1853 ...	Bolton ...	70,395	23,705	39,012
1855 ...	Cambridge ...	26,361	13,544	39,880
1855 ...	Kidderminster ...	15,399	1,000	6,800
1862 ...	Lichfield ..	6,893	2,300	3,000
October 18 1852 ...	Liverpool... ..	443,938	86,676	565,344
September 1852 ...	Manchester ...	338,722	86,444	262,446
1856 ...	Westminster ...	..	8,000	48,846

* Edwards's work on *Free Town-Libraries*, ed. 1869.

SCHEDULE X.—STATISTICS OF LIBRARIES IN AMERICA, CONTAINING MORE THAN 60,000 VOLUMES.

From carefully elaborated returns printed in the seventeenth annual report of the Trustees of the "Public Library of Boston," it appears that in the United States of America, in 1869, there were seven libraries containing more than 60,000 volumes, of which five are proprietary or private, allowing admission to members or subscribers only.

City.	State.	Founded.	No. of Vols.	People Using.	Books used.	Hours Open.	Staff.	Conditions of Use.
Albany, State ..	New York	1818	76,000	18,000	115,000	10	6	Mem'ship.
Boston, Athenæum	Massachu's	1807	100,000	..	..	Not in evening	9	...
Cambridge, Harvard College ..	"	1764	118,000	..	..	Not in evening	8 to 10	...
Boston, Public ..	"	1851	117,643	..	218,677	13	43	Free.
New York, Astor ..	New York	1848	138,000	28,154	74,665	..	8	Donot lend
New York, Mercantile ..	"	1820	104,513	13,000	..	13	16	Mem'ship.
Washington, Congress ..	Columbia..	1851	175,000	350	..	..	13	Mem'ship.

SCHEDULE XI.—TWENTY-EGHT LIBRARIES IN AMERICA, CONTAINING MORE THAN 20,000 VOLUMES.

It is to be borne in mind that in several of these libraries there are many copies of the same work—in some 5 to 10, in others 12 to 16, of especially popular authors. The number of novels and works of fiction is large, as also books for juvenile readers.

In some, pamphlets are reckoned singly, in others in volumes, but the average number included in each volume is not stated.

City.	State.	Founded.	No. of Volumes.	People Using.	Books Used.	Hours Open.	Staff.	Conditions of Use.
Amherst, College ...	Mass. ...	1822	24,286	300	6,000	—	—	—
Andover, Theolog. Seminary	"	1808	29,000	125	5,000	—	—	—
Augusta, State ...	Maine ...	1839	30,000	—	5,000	—	1	Prescribed classes.
Baltimore, Peabody ...	—	1862	34,588	2,639	4,589	—	5	Do not lend.
" Mercantile ...	—	1839	22,072	1,420	—	—	4	Membership.
Boston, State ...	Mass. ...	1826	29,000	—	—	—	—	—
Brooklyn, Mercantile ...	—	1817	22,000	2,000	—	12-13	8	Membership.
Cincinnati, Public ...	—	1867	21,588	—	42,730	12	4	\$3. or a guarantee.
" Mercantile ...	—	1831	30,206	3,800	36,000	14	4	Membership.
Clinton, Hamilton College ...	New York	1812	20,000	200	2,000	—	1	—
Columbus, State ...	Ohio ...	1817	31,000	—	—	—	—	Prescribed classes.
Harrisburg ...	Penns'vania	1777	39,000	—	—	—	2	Prescribed classes.
Indianapolis, State ...	Indiana ...	1831	25,000	—	2,500	—	—	Prescribed classes.
Lansing, State ...	Michigan...	1828	25,000	—	—	—	1	Prescribed classes.
New Bedford, Public ...	Mass. ...	1812	21,000	2,000	70,000	Till 9	2	—
New Haven, Yale College ...	—	1700	50,000	1,000	—	—	2	Bonds.
New York Apprentices' ...	New York	1820	42,740	6,413	117,332	11	8	Voucher.
" Society ...	—	1839	28,000	250	3,500	—	2	—
" Union Seminary .	—	...	57,000	—	—	—	—	—
Philadelphia, Academy of Science ...	Penns'vania	1812	21,580	1,200	—	—	1	Membership.
Philadelphia, Mechanics' ...	—	1820	20,000	1,616	24,897	—	6	Guaranty & deposit.
" Mercantile ...	—	1821	47,000	6,300	135,018	13	10	Mem'ship or "
Providence, Brown University.	Rhode I. ...	1764	38,000	1,000	13,000	4	1	—
" Athenæum ...	—	1836	30,566	3,000	60,000	10 to 11	3	Membership.
San Francisco, Mercantile ...	San Frisco	1853	25,000	2,500	70,000	13	3	Membership.
Springfield, Public ...	Mass. ...	1857	26,488	1,600	80,000	Till 9	2	—
West Point, Military Academy	Georgia ...	1812	21,554	400	16,820	—	2	Membership.
Worcester, Public ...	Mass. ...	1860	21,000	4,000	60,000	—	—	—
" American Anti-quarian Society ...	—	1812	50,000	—	—	—	1	—

SCHEDULE XII.—FREE TOWN-LIBRARIES OF FRANCE. *

When Opened.	Name of Town.	Population of Town, 1861.	Aggregate No. of Vols. about 1855.	Average Daily No. of Readers.
About middle 18th century }	Amiens ...	58,780	53,600	40
	Avignon ...	36,081	61,200	18
	Bastia ...	19,304	20,012	25
	Besançon ...	46,786	81,500	40
	Blois ...	20,331	20,010	12
	Bourges ...	28,064	20,310	10
	Carpentras ...	10,918	25,800	6
Founded 1823 ...	Charleville ...	Under 10,000	23,399	5
	Havre ...	74,336	23,605	50
	La Rochelle ...	Under 10,000	22,324	5
	Niort... ..	20,831	21,021	6
	Pau	21,140	20,000	40
	Poitiers... ..	30,563	23,089	12
	Saintes	10,962	22,030	8
	Strasburg ...	82,014	181,589	50
	Toulouse ...	113,229	50,700	140
	Versailles ...	43,899	56,039	20
	Vesoul	Under 10,000	23,441	20

* Edwards's *Free Town-Libraries*, ed. 1869.

SCHEDULE XIII.—FREE TOWN LIBRARIES IN GERMANY.—ESTIMATED NUMBER OF VOLUMES IN 1869.*

When Opened.	Name of Town.	Population of Town.	Estimated No. of Volumes.	No. of Readers.
...	Cologne ...	(In 1861) 120,568 ...	52,000	
1620	Bremen ...	(In 1862) 98,575 ...	36,000	
1580	Dantzic ...	(In 1861) 82,715 ...	43,000	
1599	Elbing ...	(In 1861) 25,539 ...	20,500	
1816	Erfurt ...	(In 1864) 40,143 ...	32,500	
1484 {	Frankfort-on-Maine ...	{ (In 1864) 89,837 ...	84,000	
1616	Lubeck ...	(In 1862) 31,898 ...	44,000	
1445	Nuremberg ...	(In 1861) 62,797 ...	52,000	

* Edwards's *Free Town Libraries*, ed. 1869.

SCHEDULE XIV.—ITALY.—NUMBER OF VOLUMES IN LIBRARIES CONTAINING 18,000 AND UPWARDS.*

When Opened.	Name of Town.	Population of Town.	No. of Volumes.	Yearly Aggregate of Readers.
1663	Como ...	(In 1850-51) 20,000 ...	21,000	2,550
1759	Forli ...	(In 1843) About 16,000 ...	50,000	9,000
1824	Genoa ...	(In 1848) 100,382 ...	39,000	50,000
	Perugia ...	About 19,000 ...	25,608	451
1784	Piacenza ...	About 30,000 ...	42,000	1,800
	Ravenna ...	About 18,000 ...	36,257	451
1619	Rimini ...	About 10,000 ...	24,100	792
Abt. 1759	Siena ...	About 20,000 ...	45,641	6,858

* Edwards's *Free Town-Libraries*, ed. 1869.

SCHEDULE XV.

*Melbourne Public Library.**Conditions upon which Books will be lent by the Trustees to Free Public Libraries.*

1. Books will be lent to the trustees or committees of Free Libraries, Mechanics' or Literary Institutions, or to the Councils of Municipalities.
2. The borrowers shall place the books lent in a suitable apartment to be approved of by the Trustees, and admit the Public to the use of the books therein for such hours as may be appointed by the local committee, but in other respects subject to the rules of the Melbourne Public Library.
3. The borrowers shall insure at their expense the books lent to them in a sum equal to the value thereof, and shall deliver to the Trustees the policy and receipt for the annual premium; all insurances to be made payable at Christmas in each year.
4. The borrowers shall bear all the expenses of taking the books from and returning them to the Library, and of having them collated on their return (the cost of collating not to exceed 5s. for 100 volumes), and no final receipt will be given for the books until after they are collated, and adjustment made for any imperfections or loss, if any.
5. The borrowers shall give security to the satisfaction of the Trustees in an amount equal to the value of the books lent to them, that the works will be returned at the expiration of the period of the loan in good condition, regard being had to reasonable wear.

6. The borrowers and sureties are to be liable for—

1. The value of any book not returned.
2. If a volume of a work consisting of several volumes, or if a set, or if a series, then the value of the work, set, or series.
3. The estimated value of the injury done to any volume, work, set, or series, or book-case, of which the Trustees shall be the sole judges.

Signed,

Witness, _____

Lending Library.

BOOKS CLASSIFIED.

Agriculture and Botany	...	...	...	...	...	...	...	55
Ancient History, and Literature	...	...	...	...	...	...	...	225
Animal Physiology	...	...	...	...	...	...	...	133
Applied Science	...	...	...	...	...	...	...	391
Art and Music	...	...	...	...	...	...	...	98
Australia	...	...	...	...	...	...	...	101
British History	...	...	...	...	...	...	...	666
British Literature	...	...	...	...	...	...	...	1396
Chemistry, Medicine, and Geology	...	...	...	...	...	...	...	116
Dictionaries and Cyclopædias	...	...	...	...	...	...	...	99
Geography, Maps, and Travels	...	...	...	...	...	...	...	697
Law and Polity	...	...	...	...	...	...	...	117
Modern History and Literature	...	...	...	...	...	...	...	493
Science	...	...	...	...	...	...	...	127
Veterinary and Sporting Arts	...	...	...	...	...	...	...	49
War and Warfare	...	...	...	...	...	...	...	203
								<hr/> 4966 <hr/>

MEDICINE.

MEDICINE.—The practice of Medicine in Victoria is regulated by Act of the local Parliament, whereby a Medical Board is constituted, to which every intending practitioner must submit the diploma or certificate of some regularly constituted and recognised University or School of Medicine, as a condition of enrolment as a legally qualified medical practitioner; without which, any person practising as a physician or surgeon is subject to criminal prosecution, and heavy penalties. Applicants for registration are required to show that they have undergone a three-year course of medical or surgical study, and to produce a diploma which must have been obtained on personal examination from some University or Medical College recognised for the purpose of granting such diplomas in the country to which such University belongs. Persons practising medicine or surgery without being registered are liable to a fine of £50. No fee is charged for registration. The number of names on the medical register or roll of legally qualified medical practitioners is at present 508.

Amongst these practitioners, there is a voluntary association, called the Medical Society of Victoria, at the periodical meetings of modes of which treatment and means for the amelioration of disease are discussed.

Apothecaries and chemists are allowed to carry on business without enrolment, but have amongst them an organisation called the Pharmaceutical Society, with the object of protecting the public from unqualified and ignorant persons vending drugs or compounding medicines.

VICTORIAN DEAF AND DUMB INSTITUTION.

1. The objects of the Institution are—1st. To provide a home and instruction for the deaf and dumb. 2nd. To assist in the maintenance of those deaf and dumb whose parents or friends may be unable to pay the required fees.

2. The affairs of the institution are administered by a president, two vice-presidents, a treasurer, a secretary, and a committee of twelve others, three of whom form a quorum.

3. The officers and committee are elected annually at a general meeting of contributors to the funds of the institution of £20 and upwards, and of annual subscribers of £1 and upwards.

4. Religious instruction is provided under the direction of the committee, but mutes are admitted to the full benefits of the institution, irrespective of creed or nation.

Days of admission for visitors—Tuesdays and Thursdays, from 10.30 to 11.30 a.m., and from 2 to 3 p.m.

Private pupils are received into the superintendent's family. Terms (quarterly, in advance):—For children, between seven and twelve years of age, £40 per annum; and above twelve years of age, £45 per annum; washing, £3 per annum extra.

During the year 1875 eight new pupils have been received, and a former pupil re-admitted. Seven have been discharged, and two who were employed as domestics in the establishment have removed to other situations, so that the present number of inmates is the same as at the last annual meeting—viz., eighty-two.

Since the commencement of the institution, one hundred and fifty pupils have been admitted, and sixty-eight have left. The latter, with few exceptions, are now in various ways maintaining themselves, and living intelligent, useful, and respectable lives, thus affording satisfactory evidence that the objects of the institution are being realised.

The efforts of the committee to increase the tutorial staff have hitherto proved ineffectual. Teachers have been advertised for in this and the neighbouring colonies, and a direct appeal for help has been made to the principal of the New York institution, but in each case without success.

During the year a pupil teacher has been appointed, and several of the elder scholars have occasionally assisted in teaching the junior classes, but there is still urgent necessity for obtaining, if possible, an increase in the number of teachers. The Committee, however, have the pleasure to state, that notwithstanding the deficiency in the number of teachers, many of the pupils are making encouraging progress in the various branches of education in which they are instructed, and reflect great credit on the assiduity and ability of the head-teacher and his assistant.

In the industrial department six of the boys are learning bootmaking, eight tailoring, and eighteen are being instructed in gardening.

It was deemed expedient to send a case of boots and shoes, manufactured by the inmates, to the Melbourne Intercolonial Exhibition, and the workmanship of the articles exhibited was very favourably spoken of in the public journals, and has obtained the second prize for hand-made goods.

In the months of February and March last, a number of the pupils suffered from an attack of measles, but in no case did the disease assume a serious form. This latter fact no doubt may be in part attributed to the scrupulous cleanliness maintained in every part of the house, which, together with the general domestic order uniformly preserved throughout the entire establishment, affords ample evidence that its internal affairs are most efficiently managed by the superintendent and matron, Mr. and Mrs. Rose.

With the above-mentioned exception, the inmates have enjoyed the best of health during the whole year. It is considered, however, in order to complete the hygeian arrangements of the institution, it will be necessary to erect as speedily as possible an infirmary, isolated from the main buildings, so that the spread of infectious diseases among the pupils may be prevented, and the sick from other causes secure that quietude and receive that special attention so necessary for their comfort and recovery.

During the year 1875 the friends of the institution subscribed towards its funds the aggregate sum of £1078 18s. 7d.—viz., £669 18s. 6d. towards maintenance, and £409 0s. 1d. in aid of the building fund. The Government grants for the year have been £1800 for maintenance, and £1000 for building.

THE MICROSCOPICAL SOCIETY.

[FROM INFORMATION FURNISHED BY MR. R. ROBERTSON.]

The Microscopical Society of Victoria was formed in the year 1873.

Mr. Robert Robertson, a surgeon practising in St. Kilda, Melbourne, first took the matter in hand, and issued a circular to members of the different scientific bodies and others, inviting their assistance and co-operation in the formation of a microscopical society, and to attend a meeting which was held 31st July, 1873. Professor Ellery presided. About twenty-five gentlemen were present; and after discussing the matter, a provisional committee was chosen to draw up a code of rules, &c., consisting of Professor Ellery, Mr. W. H. Archer (then Registrar-General), Mr. Sydney Gibbons (analytical chemist), and Drs. Wigg, Ralph, and R. Robertson. A few preliminary meetings were held for election of office-bearers, &c.; and the inaugural meeting was held in the Royal Society's Hall, on 10th October, 1873. The office-bearers were:—Mr. W. H. Archer, president; committee, Drs. Barker, Wigg, Ralph, Girdlestone; Mr. Sydney Gibbons and Mr. R. Robertson as honorary secretary and treasurer. The president, in his inaugural address, gave a resumé of microscopical work already done in the colony, together with valuable notes on the microscope generally. The society has gone on steadily progressing, and has already done some useful work. At the expiration of twelve months, Mr. T. S. Ralph was elected president; Messrs. Archer, Barnard, Sydney Gibbons, Drs. Sturt and Girdlestone as committee; and Mr. R. Robertson re-elected honorary secretary and treasurer.

Up to the present date (September, 1875), the society has recorded some interesting papers, among the chief are the following:—"Rye-grass

parasite ; *Isaria graminipuda*," by Mr. Ralph ; "An investigation of some 'entozoa' found in sheep, and proving very fatal to them," by Dr. Wigg and Mr. Ralph ; "The microspectroscope," by Prof. Ellery ; and "A mode of detecting sewage contamination in water," by Mr. Gibbons, who also followed with a paper on "The transformation of monads ; Dr. Sturt gave the "Microscopical examination of lithofracteur ; and one of the most interesting exhibitions to the colony was that of wool-classifying apparatus, invented by Messrs. Hesse and Rummell, Mr. Ralph gave some observations on the nature and character of the blood ; Dr. Wigg "Some points in the microscopical examination of handwriting." "Carbolic acid in preparing microscopical objects, and rendering animal tissue transparent," has been frequently discussed and demonstrated, and to Mr. Ralph and Mr. Barnard belong the credit of first introducing this subject. Among others of Mr. Ralph's microscopical workings are "The state of the blood and exhalations of the body," "Measles and scarlatina," "The blood of the horse and ass," "Entozoa found in the muscles of cattle identical with those found during the rinderpest in 1865," and others of more local interest. Mr. Sydney Gibbons has contributed a ready mode of Micrometry, "The polarization of light," "Lerp," "Crystallisation of gold," besides numerous exhibitions. Dr. Sturt discussed "Tasmanite," "Lignite," "Fungoid disease of house-fly," and several local diatomaceous deposits. Mr. C. M. Maplestone, of Maryborough, Victoria, has contributed the following valuable papers :—"A means of advancing Microscopy in Victoria ;" "Victorian Diatoms ;" "Hairs of Victorian animals ;" "The anatomy of the apas ;" and "The results of his observations with the microscope in Victoria." These are some of the principal papers given to the Society, and will show that work has been done. The transactions of the Society are not yet published. Evenings for demonstrations only are held every month, when some of the junior members instruct the associates in the manipulation and mounting of objects, &c. The society now numbers 30 members and 24 associates, and is at the termination of its second successful year, and bids fair for the future to keep up its good working condition, as several gentlemen have sent in their names for election, and good work is being prepared, several gentlemen having promised to take up special subjects and bring them forward for discussion. Mr. Ralph has just been re-elected president, and Mr. Robertson hon. secretary for the ensuing year, 1875 and 1876. The annual meeting is held the last Thursday in September, an annual conversazione the last Thursday in October, besides the monthly meetings held on the last Thursday in the month at the City Coroner's office, Prince's Bridge, Melbourne.

THE NATIONAL GALLERY OF VICTORIA.

At the time of the foundation of the Melbourne Public Library, which preceded the incorporation of the present institution, the projected plan included, with the Library, a Museum of Fine Arts and a Picture Gallery, to which would be eventually added a Drawing School and School of Design.

On the occasion of the opening of the Queen's Room, by His Excel-

lency Sir Henry Barkly, K.C.B., on the Queen's Birthday, 1859, the Trustees presented to him an address, in which was the following statement:—"The Trustees rejoice to be able to say that within the last year they have been able to extend their operations by commencing the establishment of the Museum, and enlisting an auxiliary element of refinement. The sum of £2000, voted by Parliament for that purpose, has been remitted to England for the purchase of casts of some of the choicest statues, busts, and alto-relievos, by the most celebrated sculptors; of coins, medals, and gems—(the useful handmaidens of history as well as of decorative adornment), and representations of remarkable architectural objects of Europe and elsewhere, taken by the process of photography. These, when received, will be placed in the hall and chambers on the ground-floor. In this department it is proposed to adopt the plan of illustrating the historic development of art. Commencing with a few of the most striking productions of Nineveh, Egypt, and Etruria; to proceed through the Grecian schools, and those of the early, mediæval, and later Italian eras, to modern times; and to obtain from each of the European studios examples of distinguished merit. It is their hope that they may be able to trace the outline of a scheme of public instruction (to be filled up a future time), valuable in many ways; by which the chief epochs of mental pre-eminence may be strongly marked; the relative and distinctive modifications of thought, power of conception and demonstration, peculiarities of manner of treatment (so illustrative of the economy of internal domestic life), as well as excellence of execution, may be displayed; and whereby a new stimulus may be given to intellectual culture, to the general elevation of taste, and to the full appreciation of the pure, the beautiful, and the true."

The want of space to display pictures to advantage, and to enable students to receive instruction, crippled the exertions of the Trustees for several years; but as the entrance-hall, with the chambers on the ground-floor of the west wing, admitted of the introduction of works of another class, they resolved to commence by exhibiting in them representations of sculpture, and other objects of art.

This project the liberality of Parliament fortunately enabled them to carry out, and they accordingly obtained from England, Rome, and elsewhere, casts of some of the choicest figures, groups, busts, alti and bassi relievi, by the most celebrated sculptors, ancient and modern; as also a collection of coins and medals, with various illustrations in carving, moulding, chasing, and inlaying—some in the true metal, some in a baser material, electrotyped to imitate the original, others in sulphur, wax, or composition—from different parts of the world. To this collection additions estimated to amount in value to more than £2300 were made from time to time by the liberality of various donors.

In the month of October, 1863, a Royal Commission was issued empowering the gentlemen therein named to inquire into the subject of the promotion of the Fine Arts in Victoria, to submit a scheme for the formation of a Public Museum, Gallery, and Schools of Art, and to determine the best mode of expending one thousand pounds in the commencement of a Public Gallery of Art.

To the members was entrusted the expenditure of that sum, as also of the sum of one thousand seven hundred and sixty-six pounds two shillings subsequently voted.

They requested the then President of the Royal Academy in London, Sir Charles Eastlake, to select for the gallery pictures of a suitable description.

Those at first received were exhibited in the northern end of the reading-room, fitted up for the occasion, and, after the enlarged building had served the objects of the Intercolonial Exhibition and was handed over to the Trustees, additional space was gained for the *temporary* display of pictures in the south gallery.

The Trustees were then enabled to hang there the number selected by Sir Charles Eastlake :—

1. "Bunyan in Prison"—Folingsby.
2. "Depart du Fiancé"—Koller.
3. "Fern Gatherer"—Herdman.
4. "Ferry on the River Nimfa"—Penry Williams.
5. "French Artists in a Spanish Posada"—Vibert.
6. "Horses and Pigs"—J. F. Herring.
7. "La Belle Yseult"—Bedford.
8. "Pilgrim Fathers"—Cope.
9. "Poultry Vendor"—Schendel.
10. "Sheep in Repose"—Tschaggeny.
11. "Watergate Bay"—Mogford.

They afterwards applied themselves to carry out that portion of the original design.

Empowered to continue the purchase of pictures, they adopted, without variation, the recommendations submitted by the Commission, and acted on them with strict regard to the spirit of the report.

After the death of Sir Charles Eastlake, Mr. Alfred Taddy Thomson, formerly resident in Victoria, was requested to act for them in London; at first, to procure the execution of pictures by commissions to six distinguished members of the Royal Academy, afterwards, by purchase.

Mr. Thomson continued to favour the Trustees with the benefit of his services, under the instructions previously conveyed, which were as follow:—

"(Clause 30.) The selection should proceed on an organised system, capable of extension in various directions, so as to illustrate history, both sacred and secular, poetry, domestic life, landscape, portraiture, and those subjects more immediately required for instruction in drawing, and that such copies as may be deemed necessary be added from time to time.

"(Clause 31.) A twofold object would be thus accomplished; one, in the acquisition of choice works of contemporary artists, for the pleasure, improvement, variety, and contrast which they afford; another, in the illustration of the history of Art.

"(Clause 32.) In the expenditure of the funds at command, the first consideration should be to maintain the standard of excellence.

"(Clause 32.) It would be, in our opinion, judicious in future to

select a few pictures of large size and of high order instead of a greater number of smaller size, choosing them from such sources as have been hitherto sought, or as are within reach, in Europe; or procuring them by express commission to artists of eminence."

Of the excellence of the five original pictures selected by Mr. Thomson, no second opinion has been expressed.

1. "Arab Prisoners"—Hodgson.
2. "Autumnal Showers"—Graham.
3. "First Snow"—Weber.
4. "Question of Propriety"—Long.
5. "Rotterdam"—Webb.

In this place may be appropriately mentioned the successful Fine Art Exhibition which was held in the great hall of the institution in the year 1869.

The Trustees in that year took advantage of the first available opportunity of acting on the recommendation contained in the report of the Commission of Fine Art.

The clauses referred to are:—"53. We believe also that it would be prudent to empower the Trustees to receive upon loan, objects suitable for exhibition, and to allow occasional temporary loans by them to organised and responsible bodies in county towns, of such objects as would bear removal, all expenses being paid by the borrowers, and the usual precautions and securities being taken against injury and loss.

"The successful working of such a system has been fully established in England, in contributing to which Her Majesty the Queen has set an illustrious example, followed in a spirit of the amplest generosity by the nobility, gentry, and by public institutions.

"54. The exercise of the former privilege would bring to light many objects, curious, interesting, and valuable, the existence of which in this country, is at present hardly known to any but the possessors of them. It could not but be pleasing to the owners to see exhibited under favourable conditions the cherished treasures which they have brought with them from distant countries, and it would be gratifying to the public to share that pleasure, while such an arrangement could not fail to operate here, as elsewhere, in creating additional interest in the subject of Art.

"55. As regards the latter, all the reasoning in favour of such a measure in a country where Art-treasures exist in such unbounded profusion, and where the means of and ability for locomotion to visit the seats of them are so abundant, applies with multiplied force to this country, in which such objects are so rare, and in which the means of travelling are so much more limited.

"56. There ought not to be any hesitation in following, if it can be done with safety, so enlightened a precedent, the effect of which will be to extend the area within which those honoured with the management may diffuse the improving, refining, and elevating influences created by the presence of such works, to dispel the erroneous notion that a desire exists to centralise them in, and confine them to Melbourne, and to enlist a larger portion of the community in direct

and cordial alliance with the Institution; while other not less important consequences may be expected to follow here, as elsewhere, from such a course of proceeding, in the unfolding of new sources of industry and enjoyment, and in additions being thereby made to the material wealth of the country."

Persons resident within the immediate neighbourhood of Melbourne were requested to lend to the Trustees paintings and objects of Art of various descriptions, and the request was replied to in a spirit of the most obliging liberality.

The Exhibition was attended with a success beyond the most sanguine expectations. It was kept open for 94 days, the number of visitors amounted to 14,634, the receipts for daily admission and season-tickets reached the sum of £2511 18s., and after defraying all expenses a handsome balance remained.

In order to perpetuate in a substantial manner the recollection of the result and in grateful recognition of the help by which they were favoured, the Trustees resolved to invest this surplus, and to endow a scholarship, founded to reward the most deserving pupil in the School of Painting, and School of Design, in alternate years.

The following objects of art were exhibited : —

FINE ART.										
Oil Paintings	-	-	-	-	-	-	-	-	-	741
Water-colour Paintings	-	-	-	-	-	-	-	-	-	301
Sketches and Drawings	-	-	-	-	-	-	-	-	-	136
Engravings and Etchings	-	-	-	-	-	-	-	-	-	200
Plain and Chromo-lithographs	-	-	-	-	-	-	-	-	-	27
Photographs and Photo-lithographs	-	-	-	-	-	-	-	-	-	335
Needle, Feather, and Leather Work	-	-	-	-	-	-	-	-	-	51
Miscellaneous	-	-	-	-	-	-	-	-	-	203
Architectural and Naval Drawings	-	-	-	-	-	-	-	-	-	13
Sculpture	-	-	-	-	-	-	-	-	-	31
Casts	-	-	-	-	-	-	-	-	-	140

ORNAMENTAL AND DECORATIVE ART.

Carvings in Wood, Metal, Ivory, &c.	-	-	-	-	-	-	-	-	-	91
Jewellery and Goldsmiths' Work	-	-	-	-	-	-	-	-	-	51
Coins, Medals, Cameos, and Seals—Collections of	-	-	-	-	-	-	-	-	-	88
Workings in Precious and other Metals	-	-	-	-	-	-	-	-	-	68
Arms, Armour, and Accoutrements	-	-	-	-	-	-	-	-	-	16
Miscellaneous	-	-	-	-	-	-	-	-	-	45
China and Porcelain	-	-	-	-	-	-	-	-	-	51
Pottery	-	-	-	-	-	-	-	-	-	10
Glass	-	-	-	-	-	-	-	-	-	7
Japan, Lacquer, and Wax Work	-	-	-	-	-	-	-	-	-	12
Writing, Printing, and Bookbinding	-	-	-	-	-	-	-	-	-	23

2640

In their first report to the Parliament in the year 1870-71, the Trustees of the present corporation stated that since the year 1861 the gallery had acquired thirty-five oil-paintings by purchase, and thirteen by donation; that during the year 1870, they had secured the services of Mr. Herbert, R.A., and Mr. Ruskin, in the task of assisting Mr. Thomson in the purchase of pictures and works of Art for the Gallery, and that five oil paintings had been added to the collection—

1. "Bamborough Castle"—Hunt.
2. "Cottage Interior"—Frère.
3. "Druidical Monuments"—G. E. Herring.
4. "Memories of the First Palm Sunday"—Courtauld.
5. "Playing at Grandmother"—Gray.

In the same year the Trustees requested the Government to place upon the estimates a sum of £7000 for the completion of a new wing, and accompanied their request by the following statement:—"In reference to the sum of £7000 for the completion of a new wing, the Trustees take leave to strongly urge upon you the needs of the institution in this particular. The room which has been used as a temporary Picture Gallery hitherto, is, in certain important particulars, unsuited to the purpose. It is not fire-proof, is subject to extreme variation of temperature, and, from its construction to secure ample ventilation, the dust is freely admitted when the wind blows from certain quarters. The pictures are suffering from the effects of heat and dust to such an extent that several of them may, ere long, be seriously injured if the necessary provision be not made for their protection. The original Trustees and the National Gallery Committee have respectively reported most urgently on this subject, begging that a suitable place be provided for the exhibition of the valuable collection under their charge."

The Honourable the Chief Secretary, after an interview with the Trustees, was pleased to recommend the Treasurer to place £5000 on the Estimates for "Alterations and Additions for Picture Gallery at Public Library."

This sum was cheerfully voted by Parliament; and soon after it was available the Trustees called for tenders for the erection.

Twelve tenders were sent in, the lowest of which was £6980. The Trustees, in considering the best means of expending this sum, consulted with Mr. Wardell, Inspector of Public Works, Mr. Ellery, the Government Astronomer, and Mr. Hennings, the scenic artist of the Theatre Royal, on questions of lighting and ventilation. These gentlemen, together with Messrs. Reed and Barnes, architects of the Trustees, as also of the Corporation of the City of Melbourne, recommended a plan which, with some modifications, has been adopted.

The new Picture Gallery is placed on the piece of ground at the rear of the present Public Library and Museum, and runs parallel to Little Lonsdale-street. It will be eventually masked from view by the buildings which will face Russell and Little Lonsdale streets.

Inside it measures 165 feet long, by 40 feet wide, and 30 feet high to the cornice, 37 feet high to the roof.

The walls are 3 feet thick, which ensures comparatively low and equal temperature within.

An iron sliding-shutter protects the western entrance door against the risk of fire.

As the proper lighting of the Gallery, the exclusion of the sun's rays and dust, and proper ventilation, are of the most vital importance, the greatest attention has been devoted to this part of the scheme.

It is lighted by a series of skylights of thick, ribbed glass, let into the outer roof, and an inner floor of ground plate-glass; which is placed on horizontal panels in the ceiling.

The light striking from the roof descends through the horizontal panels, and is diffused in the Gallery. Such a distribution of the whole volume obviates its being sub-divided into pencils of rays, as occurs when introduced through side windows—rays which vary in direction at different seasons of the year and hours of the day—and it admits of each wall being used with equal advantage, and all the pictures being examined under conditions most favourable for the full appreciation of their merits.

The roof is ventilated by a number of air-flues in the walls, carried up from the basement and opening into the enclosed space of the lantern in the roof, supplying a constant current of cool air, comparatively free from dust. Thus the glass forming the ceiling of the gallery is to a great extent kept free from the deposit of matter calculated to obscure the light. Trap doors at convenient points have been provided to enable the attendants to clean the lantern when it is necessary. The ventilation of the gallery itself is provided for by gratings inserted in the floor, and also by flues carried up the walls from the basement, opening into the space in the frieze of the cornice above the pictures. The escape of the vitiated air is provided for by openings in the ceiling leading into flues in the walls.

While the Gallery was in course of erection, two pictures—

1. "Italian Brigands"—M. Layraud,
2. "Travelling Tinker"—E. Opie,

Chosen by the Board of Selection in England, were purchased and have been received; these with the others make the number of oil paintings in the possession of the Trustees at the time of the opening of the New Gallery in May last, 62 in number.

For those purchased by the Trustees, an aggregate sum of £8085 has been paid. It must be acknowledged that their intrinsic value considerably exceeds that amount. They are now deposited in a gallery expressly built for their reception, capable of containing those likely to be acquired within several years—a gallery exempt from many, if not all, of the known and admitted defects existing in palaces not originally constructed for the exhibition of paintings, and signally in this respect, that it is so built and so substantially that anxiety as to the probable destruction of the pictures by fire is removed.

The collection, although still small, is interesting and instructive; varied as regards subject, style, mode of treatment, and the country and schools of the different artists.

A growing inclination on the part of the public to visit the Gallery, as the attractions have been multiplied, has been remarked. An increased number of pupils in the Schools of Painting and Design manifests an appreciation of the charms afforded by a study of these arts—while the possession of these works and the opportunity of admiring them has awakened in the youth of the country, who have not seen others elsewhere, new ideas; and in those who had not enjoyed such

opportunity during many years of residence here, has revived a dormant faculty.

The Gallery was opened to the Public on the Queen's Birthday, May the 24th, 1875.

THE MELBOURNE PHILHARMONIC SOCIETY.

The Melbourne Philharmonic Society was established in 1853. Mr. John Russell was the first conductor ; Mr. Patterson, honorary secretary. The first concert was given in the Mechanics' Institute, under the patronage of His Excellency Lieutenant-Governor C. J. Latrobe. The society was formed for the practice and cultivation of high-class music—vocal and instrumental ; and (although with an occasional struggle) the society has always managed to keep up its position as the premier society in the colonies, and has succeeded in engaging and giving concerts with all the best artists that have visited our shores for the last twenty years. During the past year (with Mr. Summers as conductor) the society has given two of the greatest concerts ever produced in the colonies, viz., Bach's Passion according to St. Matthew, and The Creation, the last-named with Madlle. Ilma De Murska.

ON GYMNASTICS IN VICTORIA.

[FROM INFORMATION FURNISHED BY GUSTAV TECHOW, ESQ.]

There are in Melbourne proper four public gymnasiums, one, the "National Gymnasium," Government property, and the other three private undertakings, in all of which classes are carried on for the full-grown and the growing of both sexes. Then there are similar gymnasiums in several of the suburbs of Melbourne and in some of the larger country townships, besides numerous private ones in connection with almost all the principal educational establishments for both girls and boys. With regard to State schools, provision is made in the new Education Act for military drill and gymnastics to form part of the regular curriculum, but practically that provision is not yet carried beyond its first stage, viz., the introduction, under the name of "class drill," of elementary exercises in turning, marching, and a few simple extension-movements. A more extensive organisation, however, has been for years past prepared by the training of teachers, under the auspices of the Education Department, in squad and company drill, and the usual exercises of the gymnasium, as free standing, dumb-bell and pole exercises, besides the exercises on the apparatus. Latterly, the question has also been under consideration to add systematic instruction in swimming to the course of the above teachers' classes, and for the purpose to erect a large swimming-bath in connection with the National Gymnasium, but owing to the large demand on the funds of the department for the building of new schools, that project had for the present to be abandoned.

It will be seen from the above that earnest attention is paid and ample provision made throughout this colony for the practice of systematised exercise as represented in the gymnasium ; and if to this

is added the consideration of the enthusiasm which has for years past, and still at the present moment characterises in growing proportions the pursuit of the usual out-of-door sports, as carried on in the numerous cricket, football, and rowing clubs, it will be admitted that the physical development of the people of Victoria rests on safe grounds and promises well for the future.

BATHS.

[FROM INFORMATION FURNISHED BY GUSTAV TECHOW, ESQ.]

Melbourne is, through the Yan Yean, well supplied with water for domestic bathing; accordingly almost all the houses in city and suburbs are provided with shower and plunge baths which are freely used by young and old throughout the year. But it is very much to be regretted that the systematic pollution of the Yarra prevents the establishment of swimming baths in the river itself. The two so-called swimming baths erected by the Corporation—one in the north end of the city, the other close to the river's bank—do not make up for the want, and the sea shore is therefore the principal retreat for swimmers. All the suburbs located there have regular fenced-in bathing grounds, but the favourite place is St. Kilda, with four or five large and well-appointed establishments for both sexes.

Distance and expense, however, exclude the great mass of Melbourne people from the regular use of these baths, and it is therefore hoped that the combined efforts of the lately established "Humane Society" and "Australian Health Society," with the Education Department, will speedily supply the long and seriously-felt want of regular swimming schools, first for Melbourne itself and then all over the country.

LOCAL GOVERNMENT.

For the purposes of local government the colony is divided into cities, towns, boroughs, and shires, with municipal corporations, the oldest of which is that of the City of Melbourne, incorporated in 1842, and the next, that of the Town of Geelong, in 1849; both of which are constituted upon the model of the Municipal Reform Act of England, 5 & 6 William IV. c. 76, of mayor, aldermen, councillors, and citizens, or, in the case of the town, burgesses.

The other existing municipal corporations took their origin in an Act passed by the local Legislature, in December, 1854, and are now under the provisions of the Local Government Act, 1874. They consist of and are governed by a mayor (or, in shires, a president), and councillors. There are, besides Melbourne, two other cities, namely, Ballarat and Sandhurst, and of cities, towns, and boroughs there are in all 60, covering, as recorded by the Government statist, an estimated area of 240,966 acres; population, 395,238; number of ratepayers, 88,222; number of dwellings, 87,314. Of shires, there are 110, with estimated area of 47,277,920 acres; population, 378,473; ratepayers, 83,524; dwellings, 81,900; making in all—number of municipal districts, 170;

estimated area, 47,518,886 acres; population, 773,711; number of rate-payers, 171,746; number of dwellings, 169,214. The rates levied are almost uniformly one shilling in the pound, for general municipal purposes, with, in Melbourne, an additional rate of fourpence in the pound for lighting the streets; and in some other places special rates for repayment of loans for specific local improvements.

PENAL DISCIPLINE.

The number of prisoners under detention in all the establishments on the 31st December, 1874, was 39 in excess of those similarly circumstanced at the termination of 1873. The daily average was also increased by 42; but this by no means proves that a greater number of persons was dealt with during the year. On the contrary, the aggregate number of prisoners received in the department was less by 655 than in 1873. The return shows a greater difference, arising from an alteration in the mode of registering the prisoners; those on remand who were forwarded to the courts in the morning, and returned in the evening for the same offence, not being shown as discharged and again received in this return, as had been the practice previously. The larger average was occasioned by the sentences passed being longer than usual.

In order more clearly to exhibit the state of the prisons, a line has been inserted in the first return, which gives the number of prisoners who, unconvicted when received, were afterwards sentenced. The same return also shows the condition of the whole of the prisoners on the 31st December in 1873 and 1874 respectively; and No. 2 gives the offences and sentences of all the confinees in the several establishments during the latter year.

From Return No. 3 it will be seen that, while 8,267 prisoners under sentence were received, this number only represents 6,401 individuals; and that, of 5,900 convicted prisoners discharged, 886 were re-convicted during the year; but of these the greater portion were sentenced to very short periods.

The health of the prisoners generally continued good, although there was a small increase in the number of cases of sickness, the average being 4.62 per cent., as compared with 4 in 1873. The deaths, however, were less, being only 26 for the year, equal to a percentage of 1.60. Of these, 8 were of unconvicted persons, remanded to prison in the last stages of disease; 7 of whom were received at the Melbourne Gaol, where the mortality was greatest, but where the number of prisoners admitted with broken-down constitutions, the result of crime and dissipation, is proportionately large.

The total cost of the department was £62,312 19s. 11d., against £59,045 18s. 6d. for the preceding year. £2,163 14s. 11d. of the increase arose partly from the usual increments of the officers' salaries, but chiefly from the payment of an additional 1s. per diem to each warder not provided with quarters; fixing his wages as a payment in full and discontinuing all allowances. £760 14s. 6d., under the head of con-

tingencies, was added to the expenditure on account of the increased number of prisoners and the higher price paid for provisions and stores; and £342 12s. as wages to extra borough guards, in consequence of a greater number of prisoners having been employed for municipalities. The expense of each inmate of the prisons varied from £63 7s. 6d. as against £84 15s. 11d. in 1873 at Ararat, to £27 9s. 9d. against £26 19s. 6d. for the preceding year at Melbourne gaol.

The labour of the department is becoming increasingly profitable. As valued in 1873 it amounted to £38,597 19s. 5d., and in 1874 £54,345 7s. 3d. In every case in which it can be done the actual value of the work performed is now taken as a basis of the calculation, and accounts are passed which, where practicable, are checked by the employers of the labour to prevent mistake. In other cases the labour of able-bodied men who work well is valued at 6d. per hour, and of those who are only fit for light labour at 4½d. The valuation of the work for 1873 was much too low.

At the Williamstown penal establishment and the Castlemaine and Sandhurst gaols the value of the prisoners' labour considerably exceeded their cost. At the first-mentioned place, where all the men are able-bodied, the results are the highest. Castlemaine, where the gaol is kept full nearly to the limit of its capacity by the transfer of working prisoners from Melbourne, and where there are few invalids, comes next; and Sandhurst, where, as at Castlemaine, abundance of work is found for the prisoners by the municipality, stands third.

The other prisons fail in becoming equally remunerative, from having a small number of inmates, whose labour has to be set against the staff necessary to keep watch day and night; from the difficulty experienced in obtaining work of a payable kind in sufficient quantity; or from other sufficient causes. At Pentridge, where various trades are carried on, although the work is becoming more valuable, yet it would appear to greater advantage were it not that the expense of guarding and working so many long-sentenced prisoners is considerable; and that about one-sixth of the men are in separate treatment, who, although employed, necessarily earn little. Again, at the Melbourne gaol, a large number of prisoners are confined under circumstances which do not allow labour to be exacted from them, or who, from physical incapacity, are unable to work; yet even here considerable improvement has taken place.

The amount of cash paid into the Treasury was £10,740 0s. 10d., less by £881 14s. 0d. than in 1873; the result, not of a falling-off in the quantity or quality of the work performed within the year, which was actually in excess of that done in 1873, but in consequence of a large sum having been received in the latter year which properly belonged to an earlier period. During the year a tannery has been constructed at Pentridge, in which leather is manufactured of a superior quality, and in sufficient quantity to supply the requirements of the lunatic asylums, industrial schools, gaols, and penal establishments. A bakehouse and kitchen are also in course of erection, which will still further tend to economy in the general arrangements.

The initiation of the mark system has been productive of good results. The overseers of labour at Pentridge report that under it the prisoners work much better than they did prior to its introduction; and but for the incessantly irritating and insubordinate conduct of some 20 or 30 of

their number, who seem to take a delight in being contumacious and defying authority, the prisoners may be reported as generally well conducted. Many have been taught trades at which it is known that some who were before quite unskilled are now earning an honest living at good wages.

The Discharged Prisoners' Aid Society has been most useful as the natural sequence to the efforts made to reform the prisoners, which, while keeping in view the punitive aspect of prison discipline, commence and are carried on while the prisoners remain in the various penal establishments, more particularly at Pentridge, where the lengthened sentences afford favourable opportunities for impressing the minds of the prisoners with the moral and religious influences there brought to bear upon them individually, and tend to break off that deteriorating connection with criminal associates which shorter sentences would fail to effect. The society takes hold of the prisoner on discharge and endeavours to guide him aright. I am aware of some cases where men who, while in prison, were looked upon as almost irreclaimable, are now, as the result of help given by the society, occupying creditable positions in the colony.

The accommodation in the prisons is generally good, except at the Melbourne gaol, where, for purposes of classification, the buildings are very defective, and operate against the moral and industrial training of the prisoners. The recommended remedy for this state of things is the erection of a prison for females at Pentridge.

The establishment of the system may be summed up as follows:—

It was at one time considered sufficient that punishment, pure and simple, should be inflicted as a penalty for crimes committed against society. This led only to a hardening of the criminal, and evoked from him a sullen resistance to all authority. Attempts were made by increasing the severity of the treatment to compel submission. The result was a discipline so cruel and heartless as to be condemned by all who were not lost to the ordinary feelings of humanity, and the liberation of prisoners from their confinement, hopeless, reckless, and full of revengeful impulses.

The recoil from such treatment led to the institution of a system so replete with kindness, that gaols and model prisons became almost benevolent asylums, in which the prisoners were required to work but little, and were treated otherwise so tenderly that hard-working men, who had principle and courage enough to carry on the fight to maintain their families amid the difficulties with which they were surrounded, found that, so far as their physical requirements were concerned, they had much the worst of it in the battle of life. To illustrate the prisoners' view of reformatory influences at that time, I may mention the following case:—A prisoner, who had passed some years under punishment in England, and who was undergoing a sentence in the colonies, remarked that in England some attempts were made to reform a prisoner, but that nothing was done for that purpose in Australia. He was asked what reformatory agencies he referred to as deficient in the colonies, and reminded that, in the prison in which he then was, encouragement was given to good conduct in the form of remission of sentence granted as a reward to the deserving, and that the admonitions of the chaplain, the instructions of the schoolmaster, and the use of books from the library, were all intended to promote the moral welfare of the inmates. He seemed still to con-

sider that something was wanting, and when pressed to state what he looked upon as effective above all that had been enumerated, he said at last "We had coffee and cocoa for breakfast in England, and we have nothing of the kind out here."

A system of prison discipline was in process of time organised by Sir Walter, then Captain, Crofton, in which, while ample encouragement was given for the development of the good remaining in the moral wrecks brought under its influence, a prominent feature was work, and especially useful work, as a reformatory agent, he wisely looking upon the acquisition of industrious habits as calculated to render the effort to return to a virtuous life less difficult.

This last system in all its main features is now introduced into the Victorian prisons. Regulations have been framed with the view of inducing prisoners to make vigorous efforts to regain their lost positions in the world. Under them the every-day conduct as well as the industry of each prisoner is carefully noted in marks, by which he may not only earn a reduction of the sentence to the extent of nearly one-fourth, but also, as he progresses in the various classes through which he has to pass, may obtain many privileges, until, when arriving at the sixth, he is allowed more freedom, as well as a ration of tea and sugar and a small quantity of tobacco, or its equivalent in money; while on his discharge he receives a cash gratuity, varying in amount up to six or seven pounds, according to the time he has served and his conduct in prison. As the conduct and industry are noted daily, and any breach of discipline is immediately recorded, a prisoner who behaves badly loses marks, by which he forfeits a part, and, if his conduct is persistently bad, the whole of the remission he might have gained, and, if very badly behaved, he may still suffer the loss of a portion, or in extreme cases the whole of the gratuity and other advantages to which good conduct would entitle him. The knowledge that such a record is kept, and that it operates for or against the prisoner just as he behaves himself, must act as a strong incentive to good conduct; and the consciousness that he must earn a certain number of marks in each class through which he has to pass, before being moved on to a higher—his position being made known to him at the end of every month of his sentence—serves as a continual reminder of the effect his own action has upon his treatment and the duration of his sentence.

The inculcation of industrious habits in prisoners must be the chief aim in any system of penal discipline from which good results are to be expected. Judicious and well-timed admonitions are no doubt most necessary, and the labours of the chaplains and schoolmasters very valuable in this direction. All disciplinary arrangements, must, however, depend to a large extent for their success on the character, energy, and zeal of the officers to whom are entrusted duties requiring them to come into frequent and close communication with the prisoners; and strenuous efforts should be made to secure for such positions efficient persons. A benevolence which overlooks moral fitness in the appointment, and fails to deal strictly with acts indicative of any want of personal integrity on the part of the officers, ignores the influence which unsuitable persons may exercise upon the prisoners, whose moral welfare should be the first consideration.

No. 1.—RETURN OF PRISONERS RECEIVED IN AND DISCHARGED FROM PENAL ESTABLISHMENTS AND GAOLS DURING THE YEAR 1874.

	Penal Establishments.			Gaols.												Total.		Grand Total.						
				Ararat.				Ballarat.		Beechworth.		Castlemaine.		Geelong.					Maryboro'.		Melbourne.		Portland.		Sandhurst.
	Pentridge.	Hulk	Williams-town.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		M.	F.	M.	F.	M.	F.
Strength on 31st December, 1873 :—	585	101	26	7	1	57	20	28	1	73	10	47	4	25	3	229	191	20	...	63	20	1261	250	1511
Convicted ...	...	...	...	1	...	9	2	4	...	1	...	...	...	1	...	25	8	3	...	9	1	53	11	64
Unconvicted ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	585	101	26	8	1	66	22	32	1	74	10	47	4	26	3	254	199	23	...	72	21	1314	261	1575
Received during the year :—	...	223	...	52	8	335	126	130	26	145	48	154	58	81	32	2049	1004	63	9	320	137	3552	1448	5000
New cases { Convicted... (after-	...	...	...	11	3	86	24	20	...	17	3	14	10	22	3	526	141	4	...	89	12	789	196	985
Unconvicted wards convicted)..	...	...	...	24	3	171	47	36	3	36	7	30	10	24	6	695	215	7	2	108	50	1131	343	1474
Transfers from other stations	305	138	102	...	...	3	...	...	...	85	14	73	34	23	...	24	5	...	...	2	...	755	53	808
Totals	890	462	128	95	15	661	219	218	30	357	82	318	116	176	44	3548	1564	97	11	591	220	7541	2301	9842
Discharged during the year :—	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
To Tickets-of-leave	116	105	92	5	1	34	12	19	2	80	16	43	23	35	2	101	149	23	3	30	10	683	218	901
Freedom by remission	14	149	...	41	8	372	127	121	21	141	40	153	64	63	35	2142	983	44	4	340	134	3580	1416	4996
Freedom by time	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2
Absconded	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	25	1	26*
Died...	2	1	...	...	...	...	...	...	...	2	...	1	...	2	...	15	1	2	...	...	...	25	1	26*
Unconvicted	...	...	...	24	2	179	48	31	2	33	7	30	10	24	5	684	215	10	1	105	51	1123	341	1464
Transfers to other stations	193	95	6	7	...	25	6	19	...	15	...	14	2	16	1	346	40	1	...	45	7	782	56	838
Totals	326	350	99	77	11	611	193	193	25	271	63	241	99	140	43	3288	1388	80	8	520	202	6196	2032	8228
Strength on 31st December, 1874	564	112	29	18	4	50	26	25	5	86	19	77	17	36	1	260	176	17	3	71	18	1345	269	1614
Of whom were { Convicted	564	112	29	17	3	49	25	19	4	82	19	77	17	36	...	231	168	17	2	59	18	1292	256	1548
Unconvicted ...	...	...	...	1	1	1	1	6	1	4	...	...	...	...	1	29	8	...	1	12	...	53	13	66

* The unconvicted included in this number is 8. There were no capital punishments during the year.

No. 2—RETURN SHOWING THE OFFENCES AND SENTENCES OF CONVICTED PRISONERS IN PENAL ESTABLISHMENTS AND GAOLS DURING 1874.

Description.	In confinement on 31st December, 1873.		Increase.				Decrease.				In Confinement on 31st December, 1874.	
			New Cases.		From other Status.		Dis- charged.		Trans- ferred.			
OFFENCES.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Murder and attempts...	21	3	2	...	6	...	1	...	7	...	21	3
Manslaughter ...	21	1	9	2	11	...	14	2	9	..	18	1
Shooting, stabbing, &c.	38	2	33	2	19	2	22	1	21	1	47	4
Rape and other sexual	93	...	22	...	69	...	34	...	66	...	84	...
Abduction ...	1	...	3	...	...	...	3	...	...	...	1	...
Bigamy ...	...	1	3	...	2	...	...	1	2	...	3	...
Robbery with violence	57	...	14	..	39	...	7	...	41	...	62	...
Robbery without violence	2	2	7	3	7	2	5	1	2	...	9	6
Burglary and Housebreaking.	89	...	46	...	74	...	47	...	81	...	90	...
Stealing from a dwelling	77	4	35	1	49	1	41	4	50	...	70	2
Horse, cattle, & sheep stealing	72	2	37	...	53	...	24	2	66	...	72	...
Receiving stolen property	55	6	33	13	56	1	33	10	44	...	67	10
Forgery, uttering, &c.	80	...	32	1	57	...	29	...	55	...	85	1
Coinage...	7	1	4	2	4	...	1	3	4	...	10	...
Larceny ...	253	35	837	214	125	7	827	194	139	10	249	52
Arson ...	11	1	1	1	2	...	3	...	3	...	8	2
Felonies not included in above	23	...	23	...	13	...	26	...	19	...	14	...
Embezzlement...	18	...	7	...	6	...	12	...	6	...	13	...
Fraud ...	34	1	78	7	23	...	56	5	28	...	51	3
Perjury...	12	1	7	3	8	1	9	1	8	1	10	3
Concealing birth	...	3	...	2	...	...	...	1	...	1	...	3
Indecent offence	16	3	68	8	9	2	66	11	14	2	13	...
Illegally on premises	14	...	44	6	15	...	48	6	8	...	17	...
Idle and disorderly	45	80	318	394	25	6	269	360	64	33	55	87
Rogue and vagabond	38	8	110	10	37	23	117	29	26	...	42	12
Other miscellaneous	175	96	2568	975	46	8	2588	1004	19	8	181	67
Totals	1261	250	4341	1644	755	53	4283	1635	782	56	1292	256
SENTENCES.												
Under 1 month	32	8	2112	801	...	...	2115	794	2	...	27	15
1 month and under 3 months	86	18	696	273	...	...	706	270	1	...	75	21
3 " " 6 " "	141	87	669	279	18	...	677	302	27	...	124	64
6 " " 12 " "	116	54	384	200	98	17	350	184	105	20	143	67
2 " " 2 years	166	55	237	78	101	25	198	76	107	23	199	59
12 years and under 3 years	113	14	74	8	152	10	79	7	142	12	118	13
3 " " 4 " "	132	3	61	1	128	...	51	1	138	..	132	3
4 " " 5 " "	89	3	24	2	72	...	27	1	72	...	86	4
5 " " 6 " "	105	4	32	1	85	...	33	...	86	...	103	5
6 " " 7 " "	55	...	15	...	31	...	9	...	33	...	59	...
7 " " 8 " "	60	1	9	1	22	1	9	...	22	1	60	2
8 " " 9 " "	40	...	...	...	10	...	4	...	8	...	38	...
9 " " 10 " "	11	...	...	...	2	...	1	...	2	...	10	...
10 " " upwards	91	2	10	...	33	...	9	...	31	...	94	2
Life	24	1	...	...	3	...	...	...	4	...	23	1
Death	...	...	3	...	...	...	1	...	2	...	...	...
Indefinite	...	...	15	...	...	...	14	...	...	...	1	...
Totals	1261	250	4341	1644	755	53	4283	1635	782	56	1292	256

No. 3.—RETURN OF THE ACTUAL NUMBER OF PERSONS RECEIVED INTO GAOLS AND PENAL ESTABLISHMENTS DURING 1874, SHOWING NUMBER OF TIMES ADMITTED DURING THE YEAR.

Actual Number of Persons.		Number of Times Received during the Year.										Total Number of separate Receipts.		Number of Convicted Prisoners Received who were previously Discharged during the Year.	
		Once.		Twice.		Three Times.		Four Times.		Five Times and upwards.					
M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
5111	1290	4286	869	632	242	132	91	34	52	27*	36†	6227	2040	508	378

* Ten received six times. † Eighteen received six, 1 eight, and 1 ten times.

No. 4.—RETURN OF PLISONERS CONFINED IN PENAL ESTABLISHMENTS AND GAOLS ON 31ST DECEMBER 1873 AND 1874 RESPECTIVELY, SHOWING HOW OFTEN IMPRISONED UNDER SENTENCE.

Year.	In Victoria.								Number who had been Imprisoned under Sentence in other Countries.
	Once.	Twice.	Three Times.	Four Times.	Five Times and upwards.	Total Convicted.	Awaiting Trial who had never been Sentenced.	Grand Total.	
1873	652	293	162	108	327	1540	33	1575	75
1874	663	281	161	105	369	1579	35	1614	82

No. 5.—RETURN OF THE SANTARY CONDITION OF GAOLS AND PENAL ESTABLISHMENTS DURING THE YEAR 1874.

Period.	Pentridge.			Hulk Sacramento.			Williamstown.			Ararat.			Ballarat.			Beechworth.			Castlemaine.		
	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.
January	700	52	1	60	10	..	9	9	..	..	..	..	8	8	..	49	9	..	25	25	..
February	513	36	..	103	11	..	14	11	..	5	..	..	5	8	..	12	4	..	25	19	..
March	571	32	..	112	11	..	15	14	..	4	..	..	14	14	..	3	3	..	24	22	..
April	504	21	..	86	15	..	7	6	..	3	..	..	26	9	..	43	8	..	17	10	..
May	489	28	..	155	4	..	..	..	..	4	..	..	9	7	..	34	7	..	17	16	..
June	490	22	..	112	8	..	3	3	..	3	..	..	7	4	..	60	7	..	29	27	..
July	590	41	..	63	16	1	9	9	..	5	..	..	6	4	..	122	7	..	26	20	..
August	639	36	..	50	13	..	6	3	..	4	..	..	11	11	..	16	8	..	27	18	..
September	638	30	..	36	9	..	6	4	..	5	..	..	16	16	..	47	6	..	24	20	..
October	854	31	..	99	12	..	6	5	..	10	..	..	12	12	..	179	9	..	24	22	..
November	770	48	..	44	9	..	7	5	..	22	..	..	12	15	..	145	5	..	43	36	..
December	719	42	1	75	11	..	12	12	..	32	6	..	18	8	..	106	8	..	26	23	..
Totals	7,477	419	2	995	129	1	88	76	..	171	53	..	157	135	..	816	81	..	307	258	2
Daily average of prisoners	576			113			23			14			79			33			89		
Daily average sick..	20			2.75			.24			.47			.43			2.32			.71		
Per cent. of deaths.	.35			.88			...			...			...			...			2.24		

No. 6.—RETURN OF THE SANITARY CONDITION OF GAOLS AND PENAL ESTABLISHMENTS DURING THE YEAR 1874—Continued.

Period.	Geelong.			Maryborough.			Melbourne.			Portland.			Sandhurst.			Totals.			Daily Average Number of Prisoners.	Daily Average Number of Sick, and Rate per Cent.
	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.	Aggregate of Daily Number of Sick.	Number of New Cases of Sickness.	Number of Deaths.		
January	182	39	...	62	3	1	962	284	...	159	2	...	39	29	...	2,255	470	2	1,629	72 or 4.41
February	203	46	...	70	1	...	883	188	1	140	9	...	49	11	...	2,029	346	1	1,663	72,, 4.32
March	319	42	...	134	3	...	920	184	1	141	4	...	51	23	...	2,317	356	1	1,630	74,, 4.53
April	487	97	...	163	2	...	764	170	1	148	6	...	24	20	...	2,279	384	1	1,634	76,, 4.65
May	458	65	...	191	4	...	664	132	3	157	8	...	14	14	...	2,219	291	3	1,615	71,, 4.33
June	392	123	...	180	2	...	858	165	4	133	9	...	23	13	...	2,294	389	4	1,619	76,, 4.69
July...	423	97	...	186	2	...	770	144	...	100	7	...	20	13	...	2,319	363	1	1,593	75,, 4.70
August	228	46	...	187	4	...	819	144	2	100	7	...	35	14	...	2,130	309	3	1,613	69,, 4.27
September	202	53	...	140	4	1	745	171	1	94	5	...	48	11	...	2,025	339	2	1,611	67,, 4.15
October	228	60	1	58	...	...	862	176	1	194	6	...	26	20	...	2,565	356	2	1,631	82,, 5.02
November	237	62	...	33	5	...	896	180	2	117	4	...	30	18	...	2,365	388	2	1,635	79,, 4.83
December	261	63	...	28	...	...	1,182	215	...	67	3	2	62	18	...	2,562	410	4	1,611	82,, 5.09
Totals	3,260	793	1	1,432	30	2	10,325	2,153	16	1,550	70	2	421	204	...	27,359	4,401	26	...	...
Daily average of prisoners	84			38			464			26			84			...			1,623	...
Daily average sick..	9.92			3.92			28.21			4.24			1.15			...			..	75 or 4.62
Per cent. of deaths.	1.19			5.26			3.44			7.69			...			Total = 1.60 per cent.				

NO. 9.—RETURN SHOWING THE DESCRIPTION AND VALUE OF LABOUR PERFORMED AT THE VARIOUS PENAL ESTABLISHMENTS AND GAOLS DURING THE YEAR 1874.

Sex.	Description.	Penal Establishments.			Gaols.										Total.
		Pentridge.	Hulk <i>Sacramento</i> , Yarra Works.	Williamstown Defence Works and Graving Dock.	Ararat.	Ballarat.	Beechworth.	Castlemaine.	Geelong.	Maryborough.	Melbourne.	Portland.	Sandhurst.		
Males.		£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	Basketmakers ..	71 16 6	..	..	..	..	..	..	..	..	..	..	..	..	71 16 7
	Blacksmiths and moulders ..	851 15 0	135 6 0	..	..	..	..	..	..	..	..	..	..	..	1,336 18 6
	Bookbinders, &c. ..	237 12 4	..	..	..	..	..	..	..	..	..	..	..	..	237 12 4
	Carpenters, &c. ..	907 6 3	129 15 0	..	32 13 5	19 16 0	13 14 0	18 12 9	77 13 2	78 17 3	203 12 3	0 15 0	82 13 0	1,565 8 1	
	Hat, bag, & hammock makers ..	1,016 11 5	29 0 0	..	..	..	..	..	..	..	..	..	..	..	1,045 11 5
	Matting and mat makers ..	696 15 8	..	..	..	..	..	..	..	..	..	..	..	..	696 15 8
	Masons, bricklayers, & asstnts. ..	1,003 8 1	3 18 0	..	2 17 4	..	17 17 0	1 4 9	103 5 8	..	3 6 0	..	..	87 6 7	1,223 3 5
	Painters ..	327 4 6	47 16 0	..	16 14 0	12 16 0	73 7 0	12 8 6	110 0 5	7 9 10	77 17 0	20 12 3	59 7 9	765 18 3	
	Stonecutters ..	413 8 0	..	..	..	..	..	65 7 6	..	..	..	20 8 0	..	..	499 3 6
	Shoemakers ..	1,998 13 7	83 11 0	..	5 12 0	10 12 0	3 12 0	43 8 3	12 16 1	11 18 9	240 7 6	10 17 6	..	..	2,421 8 8
	Tanners ..	221 3 0	..	..	..	2 4 0	..	1 8 0	..	3 3 0	154 19 6	17 14 4	5 18 0	..	221 3 0
	Tailors ..	3,144 2 4	54 14 0	..	19 4 9	..	..	1 8 0	..	3 3 0	154 19 6	17 14 4	5 18 0	..	3,403 7 11
	Tinsmiths and plumbers ..	413 15 11	..	..	6 17 10	..	..	1 18 3	29 5 3	1 10 4	10 14 6	..	7 0 0	..	474 16 1
Weavers ..	1,629 9 8	..	..	..	..	..	..	..	..	..	..	..	..	1,629 9 8	
Females.	Miscellaneous labourers ..	5,533 17 6	2143 15 0	1274 4 8	266 7 10	1447 4 0	268 2	33862 6 11	433 18 8	1008 19	33107 16 5	331 7 4	2452 19 2	22,130 19 0	
	Station duties ..	5,191 19 8	1118 8 0	72 17 6	177 7 6	261 8 0	402 19 0	769 12 10	644 13 0	301 16 4	2546 12 0	319 15 11	1108 3 0	12,915 12 9	
	Knitters ..	..	..	..	..	..	..	0 12 0	2 18 0	..	83 6 6	..	..	86 16 6	
	Needlework ..	..	..	..	..	59 7 0	3 14 0	113 8 0	56 5 0	..	839 16 3	2 1 0	66 19 0	1,141 10 3	
Totals..	Washerwomen, &c. ..	..	..	..	101 13 9	154 4 7	37 4 0	278 5 4	323 11 0	53 14 0	1156 15 6	59 13 6	312 19 0	2,478 0 8	
	Totals..	23,658 19 6	3746 3 0	1347 2 2	629 8 5	1967 11 7	864 19 3	5176 9 10	1838 2 9	1467 8 9	8559 14 8	783 4 10	4306 2 6	54,345 7 3	

INDUSTRIAL AND REFORMATORY SCHOOLS.

The number of children received into the Schools in 1874 was 943, being 137 in excess of the admissions in 1873; and the number discharged was 798, against 926 for the preceding year, leaving a net increase of 145 inmates.

Thirty-seven deaths occurred in the Schools out of an average strength for the year of 1765 children. The measles, with which the children were attacked at the end of the year, added somewhat, but very slightly, to the mortality. The deaths for 1874 were about 2 per cent., against $1\frac{3}{5}$ per cent. of the daily average in 1873.

The educational returns exhibit progress, although not to the extent which might be desired. Sickness interfered with the instruction in some cases; want of mental vigour operated prejudicially in others; while in the cases of many of the children admitted to the Schools between the ages of 9 and 12 years, the want of early training tended to hinder the attainment of satisfactory results.

Much difficulty is still experienced in collecting maintenance. It is difficult, if not impossible, to prevent this. The circumstances of parents of children committed, so far as the mandates disclose them, are carefully looked into, and unless it is distinctly shown to be useless to take proceedings, the police are asked to summon the parents. The department has not, however, obtained from all the courts the help that might be given in this respect. It is suggested that magistrates should be desired, before committing children, to investigate the circumstances of their parents, and make an order whenever such a course is practicable. It is suggested also that a member of the police force in each locality should be appointed an agent of the department, to see to the enforcement of the orders in their district, and be allowed a commission on the amounts collected by their instrumentality. There may be some objection to the plan, but we have no doubt the result would be more satisfactory than at present. The duty of enforcing decisions now rests with clerks of courts, under the 86th clause of Instructions to Clerks of Petty Sessions, which is as follows:—

“It is particularly required that in each case where an order for payment of maintenance of a child sent to an Industrial School is made by the bench, and the person against whom it is made is able to comply with it, the clerk shall take the necessary steps to enforce the order. When such person leaves the district the clerk is requested to have him kept in view by the police, and the order enforced so long as he is able to pay the amount awarded. When it is ascertained to what district he has removed, the clerk in whose hands the order is must transmit it to the clerk of such last-mentioned district, to be by him enforced or otherwise dealt with as if such order had been issued by the court which he attends, and such transmission must be reported immediately to the Inspector of Industrial Schools. To prevent the risk of maintenance being levied for a period after the child has ceased to be an inmate, early notice will be given by the Inspector of Industrial Schools of the release of any child in respect of whose maintenance the clerk would have to enforce an order; but to obviate as much as possible any such risk, it will be well to allow one week's maintenance to be in arrear.”

The adoption of the boarding out scheme in this colony renders the exercise of care in the committal of children more than ever necessary on the part of magistrates, to prevent the benevolent design of the Act exercising a pauperising effect on the community. Professor Fawcett says:—

“The following case, which is no imaginary one, will bring out the point with greater distinctness. A man who is well known in the neighbourhood in which he

lives as a thoroughly good, honest, and industrious labourer, has been employed on the same farm for many years, and his wages have been regularly 12s. a week. His wife being a cleanly, industrious woman, they are just the people who would be selected by a local committee to take charge of pauper children. As all their own family have now obtained situations away from home, they would have suitable accommodation for at least three pauper children; the man and his wife would receive about 14s. 6d. a week for feeding, clothing, and housing these children; the sum may be put down as at least 15s. a week, when it is remembered that education and medical attendance are provided. The man and his wife had for many years to keep four children of their own; these children not being old enough to earn anything for themselves, and the mother's time being fully occupied with house duties, it of course followed that this man had only the wages which he was able to earn—and these we have stated to be 12s. a week—to keep himself, his wife, and his four children. The pauper children would not only be better off than the labourer's own children, but the pauper children would actually have secured to them for their maintenance a sum exceeding by 25 per cent. the amount which the labourer was able to obtain for the support of himself, his wife, and his family. Even this statement, however, does not present the contrast in its strongest light. The money devoted to the pauper children is guaranteed; it is independent of all vicissitudes of trade, and of all casualties with regard to health. * *

* * All these considerations indisputably prove that the proposed system of boarding-out pauper children will not only make a great number of the most industrious and hard-working men and women feel that they could never do half as much for their own children as is done for these pauper children; the whole country will in fact be told that parents by deserting their children will secure for them an amount of physical comfort and other advantages which probably could in no other way be procured."

The danger here referred to was foreseen by the department from the outset, and to guard against it as far as practicable the rule was laid down that no child should be boarded out in any district where there was a prospect of relatives or friends residing, the absolute separation from their children being so great a set-off to the temptation referred to that none but the most hardened parents would yield thereto. In some cases this salutary rule has had the effect of inducing parents to apply for the discharge of their children, and to make an effort to maintain them and keep them under control, in preference to being entirely separated from them. But with all the care that has been exercised, the rule has in some cases been evaded, and no doubt will be in the future, unless magistrates have parents looked after at the time they are dealing with the children, and make them feel that they are not relieved from their responsibility.

The cost per head has increased at the Melbourne, Geelong, and *Nelson* schools. But there has been a decrease at Sunbury and the Reformatory, while the cost at Ballarat varied but little from that of the previous year.

The boarding-out system continues to be successful. The number of children placed out on the 31st December, 1874, was 648. That number would have been still greater had it not been for two causes—one being the outbreak of measles in November last, which prevented many from being discharged; the second, the fact that until lately those children were kept in the school whose parents, though poor, were of good character, to prevent that separation of parents and children necessary under the boarding-out system. The Government having, however, decided that all children for whom suitable homes can be found are to be placed out, whatever the character of the parents may be, no doubt there will be a very large increase to the number so disposed of as soon as the health of the children will permit.

There are now eighty-five committees in regular communication with this department; fifty-five of these supervise both licensed and boarded-out children, one boarded-out children only, and twenty-nine licensed children only. In the twenty-nine districts the boarding-out scheme is not in operation at present. In fifty-two districts children have already been placed, and applications from these and the other four boarding-out districts are being dealt with.

The Sandhurst school still maintains its character for efficiency, although the want of suitable play-grounds for the children, and the connection with the Benevolent Asylum, which prevents them from acquiring a knowledge of kitchen duties, mar its usefulness to some extent.

In the Convent schools the children continue to be well cared for, their healthy and cleanly appearance indicating that their physical wants are properly attended to. Their educational attainments, however, hardly stand so high as in the other schools.

THE BOARDING-OUT SCHEME.

Considering it desirable that the ladies' committees, after having had practical experience of the working of the scheme, should have an opportunity of laying their views concerning it before the public, the Inspector-General of Penal Establishments invited them by circular to favour him with their opinions. Forty-three committees responded to this request. Sixteen of these simply reported that the scheme is working well, and that the children are well cared for, contented, and happy. Epitome of the other reports is given below:—

System a success. Children will grow up respectable members of community. One Roman Catholic wished to apply, but the local priest refused to sign.

Well. Could place out many more. Have all such happy looks.

Well, upon the whole. Great difference exists in families, but they are all respectable. The foster parents clothe and feed them well, and treat them as their own. Attribute this in a great measure to their mingling with other children of the district at school, and think, therefore, the department cannot be too strict in having regular returns from schoolmasters.

System highly successful. It has been the aim of the committee to prevent pecuniary motives on the part of foster parents, but it remains to be seen whether, as payments decrease, foster parents will have acquired sufficient interest to continue to maintain the children at a pecuniary loss to themselves. Committee fear that in some instances they will not, while in others are certain they will adopt the children permanently as their own.

Well. Chief difficulty is the frequent change of residence by foster parents, continued supervision and interest in certain children being thereby rendered impossible.

Has been a marvellous change to bright natural liveliness of healthy children. In only one case has the system failed; two boys becoming unmanageable had to be returned. Plans for the future of the children are as warmly discussed by foster parents as if they were their own.

On the whole satisfactory. Recommend that committees have discretion to place more than two children with a foster parent who has no family, and also that persons over 55 be allowed to have children. Parents should know nothing of them after their committal to the school.

Thoroughly convinced of entire success. Children much better cared for than are many under the care of their own parents.

Consider scheme complete success. Foster parents treat the children with the consideration and tenderness which they show to their own family.

Great affection evidently exists between parents and children.

Consider the system most excellent. Think suitable women with no children, or perhaps only one or two, ought to be allowed more than two children. Find few will take them, and none without expectation of some little pecuniary advantage.

Scheme great success. Ladies are enabled by supervision, to aid in improving the temper and disposition of the children.

* Of opinion it answers every purpose required. The difficult part for the committee will arrive when the children become old enough to maintain themselves. In very few instances is it probable the foster parent will require their services with any advantage to the children.

So far, seems to work well. It is a matter of impossibility to tell when the Catholic children go to school. Sometimes they are sent to a State school; then some of the clergy find it out, and threaten and frighten the foster parents, so that they take the children away and send them to a Catholic school for a week or two; and so they go on, always changing about.

We conclude that the scheme is approved of, but there are not sufficient Protestant children, and Catholics have no wish for them.

The success of the system depends very much on the care exercised in the selection of suitable foster parents.

On the whole satisfactorily; but the committee are not in a position to form an opinion as to how far those benefits of a moral and social character which it is desirable should attend the working of the scheme are likely to be realised.

The whole scheme works with great regularity and harmony; much more so than the ladies could have anticipated.

Of the superiority of the system the committee is daily more firmly convinced and well satisfied with the result of last year's work. It is recommended that when children exhibit tendency to an evil course in any serious degree they should be returned, and their brothers and sisters, if they have any, left with the foster parent, as the union of families, so desirable in most cases, would, in these, only lead to the ruin of younger members. It is also recommended that none but very young boys should be confided to the care of widows.

Has more than fulfilled the committee's most sanguine expectations. The cleanly aspect of the children has given rise to the frequent remark that it was a pity some of the free children of poor parents were not under the operation of the boarding-out system also.

A great success. Boarded-out children have been singularly fortunate in their enjoyment of good health at a time when measles, diphtheria, and other contagious diseases have been prevalent.

Quite satisfied with the working of the regulations. The committee's suggestions have always received every consideration.

The committee's experience confirms the opinion that the scheme would promote the happiness of the children. No serious difficulty has occurred between the committee and the foster parents; and the intercourse with the Inspector's department has been carried on with confidence on our side, and has always been met with commendable punctuality and willingness to notice our recommendations on the department's side.

† Not satisfactory. The number boarded-out has been only two, and one of these has been returned.

‡ The committee are disheartened. They have failed to get children for the foster parents who have applied.

Works very well, and will work better than the schools if the careful selection of foster parents is attended to.

Daily more convinced of the superiority of the system. In all cases of sickness the children have been excellently cared for.

* The matter referred to by this committee is one that will always be a difficulty in connection with the boarding-out scheme. To obviate it, as far as practicable I propose allowing children who may be reported physically fit by the doctor, and educationally fit by the schoolmaster, to be placed at suitable employment during the daytime (employers and terms to be first approved by the department), and the children in all cases to return to the houses of their foster parents at night. This plan, while beneficial to the children, will, I think, prevent their return to the schools.

† This district has since been supplied with all the children applied for.

‡ This district was somewhat unfortunate, partly owing to the children selected becoming ill. One of the foster parents is still unsupplied, but that is owing to her desiring children of a particular age, and none of that age have been available.

No. 1.—ADMISSIONS AND DISCHARGES.

Particulars.	Industrial Schools wholly supported by Government.	Reformatory Schools wholly supported by Government.	Naval Training Ship.	Industrial Schools partially supported by Government.	Reformatory Schools partially supported by Government.	Total.
<i>Admissions.</i>						
New Admissions	385	95	47	51	13	} 719
Re-committals	98	...	19	11	...	
Returned from Service (licensed in previous years)...	79	8	6	6	1	100
Returned Absconders	8	...	...	...	...	8
Returned from Boarding-out (sent out in 1873)	88	...	...	...	...	88
Returned from Wet-nurse (sent out in 1873)	10	...	...	...	...	10
Returned from Alfred Hospital	1	...	...	...	...	1
Returned from Eye and Ear Institution	1	...	...	...	...	1
Casuals	16	...	...	...	...	16
Total of Admissions	686	103	72	68	14	943
<i>Transfers.</i>						
To Industrial Schools from Naval Training Ship ...	31	...	...	...	...	31
To Naval Training Ship from Industrial Schools ...	...	...	44	...	...	44
To Geelong Industrial School from Abbotsford Industrial School	1	...	...	...	...	1
Remaining in Schools on 1st January, 1874 ...	1149	127	345	188	26	1835
Total	1867	230	461	256	40	2854
<i>Discharges.</i>						
To Relatives	123	21	26	18	...	188
For Adoption	4	...	...	...	...	4
To Employment	243	40	60	23	10	376
Apprenticed	10	...	6	...	...	16
By Expiration of Term (re-committed)	98	...	19	11	...	128
By Expiration of Term (left)	3	1	...	...	...	4
Entered the Naval Service ... ..	...	...	5	...	...	5
Entered the Merchant Service as Ordinary Seamen..	...	2	...	...	...	2
Absconded and not returned	10	1	1	...	1	13
Died	36	...	...	1	...	37
To the Benevolent Asylum	1	...	...	...	...	1
To Melbourne Hospital ... ..	...	...	...	1	...	1
To the Yarra Bend Lunatic Asylum	1	...	...	...	...	1
To the Kew Lunatic Asylum	1	...	...	...	...	1
To the Refuge	2	...	...	...	...	2
Committed to Reformatories	1	...	...	...	...	1
Committed to Abbotsford Convent Industrial School	...	...	...	...	1	1
Placed out under the Boarding-out Regulations ...	169	...	...	9	...	178
Placed out to Wet-nurse	37	...	...	...	...	37
Casuals	17	...	...	...	...	17
Total of Discharges	756	65	117	63	12	1013
<i>Transfers.</i>						
From Industrial Schools to Naval Training Ship ...	44	...	...	...	...	44
From Naval Training Ship to Industrial Schools ...	...	...	31	...	...	31
From Abbotsford Convent Industrial School to Geelong Industrial School ... ..	...	...	...	1	...	1
Remaining in Schools on 31st December, 1874 ...	1067	165	313	192	28	1765
Total	1867	230	461	256	40	2854

No. 2.—TABLE SHOWING THE AGES OF CHILDREN ADMITTED INTO THE INDUSTRIAL AND REFORMATORY SCHOOLS DURING THE YEAR 1874.

Under 1 year	47	7 to 8	32	13 to 14	63
1 to 2	22	8 to 9	44	14 to 15	46
2 to 3	26	9 to 10	41	15 to 16	14
3 to 4	39	10 to 11	71	16 and upwards	1
4 to 5	43	11 to 12	77		
5 to 6	40	12 to 13	81	Total	719
6 to 7	32				

No. 3.—TABLE SHOWING THE RELIGION OF THE CHILDREN ADMITTED INTO THE INDUSTRIAL AND REFORMATORY SCHOOLS DURING THE YEAR 1874.

Church of England	208	Baptist	1	Catholic Apostolic	2
Roman Catholic	308	German Lutheran	1		
Presbyterian	57	Protestants, not specified	107	Total	719
Wesleyan	30	Independent	5		

No. 4.—TABLE SHOWING PARTICULARS RELATIVE TO THE PARENTAGE OF CHILDREN ADMITTED INTO THE INDUSTRIAL AND REFORMATORY SCHOOLS DURING THE YEAR 1874.

Number of Children Admitted.	One Parent living.	Both Parents living.	Neither Parent living.	Unknown.
719	347	323	36	13

CIRCUMSTANCES AS STATED IN DEPOSITIONS.

Parents dead 36	Father a drunkard, mother dead ... 32
Parents in gaol 13	Father a drunkard, mother in gaol ... 4
Parents unable to control 14	Father a drunkard, mother in hospital ... 4
Parents unable to support 55	Father a drunkard, mother in lunatic
Parents deserted... .. 28	asylum 4
Parents drunkards 4	Father a drunkard, mother deserted... 1
Parents unknown 13	Father deserted, mother dead... .. 38
Father dead, mother in gaol 29	Father deserted, mother in gaol ... 13
Father dead, mother in lunatic asylum 3	Father deserted, mother in Immigrants' Home 3
Father dead, mother in Immigrants' Home 1	Father deserted, mother in Benevolent Asylum 1
Father dead, mother in Eye and Ear Institution 1	Father deserted, mother in lunatic asylum 5
Father dead, mother in hospital ... 14	Father deserted, mother in hospital ... 9
Father dead, mother unable to support 96	Father deserted, mother a prostitute.. 2
Father dead, mother deserted... .. 18	Father deserted, mother unable to support 54
Father dead, mother a drunkard ... 9	Father deserted, mother a drunkard... 10
Father dead, mother a prostitute ... 12	Father deserted, mother blind ... 1
Father in gaol, mother dead 21	Father deserted, mother unknown ... 1
Father in gaol, mother deserted ... 1	Father unable to support, mother dead 28
Father in gaol, mother unable to support 9	Father unable to support, mother in gaol 7
Father in gaol, mother in lunatic asylum 3	Father unable to support, mother in lunatic asylum 1
Father in lunatic asylum, mother dead 1	Father unable to support, mother in hospital 6
Father in lunatic asylum, mother unable to support 1	Father unable to support, mother deserted... .. 6
Father in hospital, mother in lunatic asylum 1	Father in employment, mother dead* 20
Father in hospital, mother dead ... 10	Father in employment, mother in gaol* 1
Father in hospital, mother unable to support 4	Father in employment, mother in hospital* 1
Father in Immigrants' Home, mother dead 1	Father in employment, mother living with him* 18
Father in N. S. Wales, mother dead... 3	Father in employment, mother deserted* 1
Father in N. S. Wales, mother in New Zealand 1	Father in employment, mother a prostitute* 1
Father in N. S. Wales, mother unable to support 8	Father in employment, mother a drunkard* 2
Father in N. S. Wales, mother a prostitute 1	Father unknown, mother dead ... 8
Father in New Zealand, mother dead 1	Father unknown, mother in gaol ... 4
Father in New Zealand, mother in lunatic asylum 2	Father unknown, mother a lunatic ... 2
Father in New Zealand, mother unable to support 2	Father unknown, mother deserted ... 2
Father in New Zealand, mother a drunkard 1	Father unknown, mother unable to support 5
Father in Queensland, mother in gaol 2	
Father in America, mother dead ... 1	
Father in America, mother a lunatic.. 2	
Father at sea, mother a drunkard ... 2	
	Total 719

* Maintenance enquiry has been made in each of these cases. In seven instances it is reported that the parents are unable to contribute; in one, the father was sent to gaol for twelve months; in another the boy was discharged to the Colonial Naval Forces; and in the remaining thirty-five cases orders have been made, thirteen of which have been complied with, and twenty-two only partially so. In five of the latter, the arrears have been recently cancelled, on account of the parents' inability to pay; in one, a warrant has been issued for the father's arrest; in two, part payment of the arrears has been made; in one, the father has gone to Queensland; in one, to Sydney; in one the father cannot be found; and the remaining eleven cases are at present under query. Seven of the children have been discharged to their parents, two have been sent to service, and one has absconded.

No. 5.—COMMITTING BENCHES AND PERIODS OF COMMITMENT.

Committing Benches.	Terms of Commitment.									Total.
	1 Year.	1 Year and a Half.	2 Years.	2 Years and a Half.	3 Years.	4 Years.	5 Years.	6 Years.	7 Years.	
Ararat ...	...	...	...	...	...	1	...	2	3	6
Alexandra ...	...	...	...	...	1	...	2	1	1	5
Avoca ...	1	...	...	...	1	6	6	...	...	14
Ballarat ...	...	...	...	...	6	1	1	1	6	15
Ballarat East ...	...	...	...	...	4	2	1	1	10	18
Beechworth ...	...	...	1	...	4	...	1	...	7	13
Brighton ...	1	...	...	...	...	...	...	...	...	1
Brunswick ...	1	...	...	...	...	...	1	...	...	2
Bealiba ...	...	...	...	...	...	...	2	...	5	7
Bright ...	...	...	...	...	...	...	...	...	1	1
Berwick ...	...	...	...	...	...	...	...	...	1	1
Benalla ...	1	...	...	...	...	...	...	...	3	4
Bacchus Marsh ...	...	...	...	...	...	...	...	1	...	1
Buninyong ...	...	...	1	...	...	1	...	1	2	5
Castlemaine ...	...	...	2	...	1	2	1	2	...	8
Chiltern ...	...	...	...	...	...	...	1	...	1	2
Clunes ...	...	...	...	...	...	...	1	...	...	1
Colac ...	...	...	...	...	1	...	2	...	...	3
Collingwood ...	4	...	4	...	3	...	1	...	12	24
Caramut ...	...	...	...	...	2	...	...	...	...	2
Creswick ...	...	...	1	...	...	...	...	...	...	1
Chewton ...	...	...	...	...	...	...	...	1	...	1
Daylesford ...	...	...	...	...	1	1	1	...	2	5
Dunolly ...	...	...	...	...	...	...	1	...	2	3
Dimboola ...	...	...	...	...	...	1	2	...	5	8
Eaglehawk ...	...	...	...	...	...	1	6	...	3	10
Emerald Hill ...	1	...	1	...	6	...	2	1	17	28
Echuca ...	...	...	...	...	...	...	1	...	2	3
Flemington ...	...	...	...	...	...	...	...	...	2	2
Fitzroy ...	4	1	2	...	4	4	...	...	5	20
Footscray ...	...	...	...	...	1	...	...	...	...	1
Geelong ...	2	...	2	...	1	...	3	...	...	8
Heathcote ...	...	...	...	...	...	...	...	1	2	3
Hotham ...	3	...	...	...	1	4	...	3	5	16
Horsham ...	...	...	...	...	1	...	...	...	2	3
Hawthorn ...	...	...	...	...	...	...	1	...	...	1
Kew ...	2	...	2	...	...	1	...	...	2	7
Kilmore ...	...	...	...	...	...	...	...	...	2	2
Koroit ...	...	...	1	...	...	...	...	...	1	2
Majorca ...	...	...	...	...	...	...	...	...	1	1
Maryborough ...	...	...	...	1	...	2	2	...	...	5
Melbourne ...	9	...	36	...	44	44	36	32	92	293
Malmsbury ...	...	...	...	...	1	...	...	...	...	1
Mornington ...	...	...	...	...	1	...	...	...	...	1
Newstead ...	...	...	...	...	...	...	...	...	2	2
Omeo ...	...	...	...	...	...	1	...	...	2	3
Piggoreet ...	...	...	...	...	...	...	...	...	1	1
Prahran ...	1	...	2	...	2	2	...	...	1	8
Richmond ...	...	...	...	...	...	1	...	...	3	4
Romsey ...	...	...	1	...	...	1	1	...	...	3
Rushworth ...	...	...	...	...	...	1	1	...	4	6
Sale ...	...	...	...	...	...	1	3	2	3	9
Sandhurst ...	...	...	...	...	5	3	16	1	35	60
Sandridge ...	...	...	...	...	2	2	3	...	13	20
Scarsdale ...	...	...	...	...	...	...	...	...	1	1
Stawell ...	...	...	...	...	...	...	2	...	2	4
Steiglitz ...	...	...	...	...	...	...	1	...	2	3
Sebastopol ...	...	...	...	...	...	...	...	...	3	3
Smythesdale ...	...	...	...	...	...	...	...	...	2	2
St. Kilda ...	...	...	1	...	1	...	...	...	...	2
Talbot ...	...	...	...	...	...	...	...	...	1	1
Tarnagulla ...	...	...	...	...	...	...	...	...	1	1
Wangaratta ...	...	...	1	...	...	1	2	...	7	11
Warrnambool ...	...	...	...	...	...	...	...	...	1	1
Williamstown ...	4	...	1	...	3	1	1	1	3	14
Wodonga ...	...	...	...	...	...	...	...	...	2	2
Total ...	34	1	59	1	97	85	105	51	286	719

No. 6.—TABLE SHOWING THE ADMISSIONS AND DISCHARGES FOR THE PAST FIVE YEARS, FROM 1870 TO 1874 INCLUSIVE.

Years.	Admissions.	Discharges.						Total.
		To Relatives.	To Employment.	For Re-committal.	Died.	Absconded and not returned.	Left on Expiration of Term, &c.	
1870	698	187	354	27	31	11	27	637
1871	865	159	210	141	57	15	22	604
1872	929	200	409	283	56	17	38	1,003
1873	806	230	434	163	37	27	35	926
1874	943	188	416	128	37	13	16	798

No. 7.—TABLE SHOWING THE AGES OF CHILDREN IN THE INDUSTRIAL AND REFORMATORY SCHOOLS ON 31ST DECEMBER, 1874.

Schools.	Under 1 Year.																Total.
	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 6.	6 to 7.	7 to 8.	8 to 9.	9 to 10.	10 to 11.	11 to 12.	12 to 13.	13 to 14.	14 to 15.	15 to 16.	16 and upwards.	
Melbourne ...	1	...	1	1	2	...	...	...	2	1	4	8	7	8	6	7	48
Sunbury	3	11	24	35	50	84	89	83	71	38	16	12	2	518
Ballarat	4	6	8	10	3	6	9	8	11	43	47	15	7	5	5	187
Geelong	5	5	9	14	4	6	3	7	18	16	22	25	16	2	3	165
Sandhurst	2	2	5	5	9	9	10	12	12	9	32	29	8	...	1	146
Naval Training Ship	3	15	48	87	83	48	21	8	313
Boys' Reformatory	5	13	16	21	34	28	23	7	147
Girls' Reformatory	1	2	6	8	3	20
Abbotsford Industrial	2	3	4	10	11	10	20	19	15	24	19	11	10	6	167
Abbotsford Reformatory	1	..	2	3	10	9	4	29
Geelong Convent Industrial	2	1	2	6	2	3	4	4	...	1	...	25
Total ...	1	7	13	24	31	56	53	68	96	146	174	269	311	230	149	94	1765

No. 8.—TABLE SHOWING THE EDUCATIONAL STATE OF CHILDREN IN THE INDUSTRIAL AND REFORMATORY SCHOOLS DURING THE YEAR 1874.

Particulars.	Classes.						
	1.	2.	3.	4.	5.	6.	Total.
Remaining on 31st Dec., 1873 ...	443	657	388	307	29	11	1835
Admitted during the year ...	465	186	95	144	7	46	943
Total ...	908	843	483	451	36	57	2778
Discharged during the year ...	223	153	137	433	41	26	1013
Remaining on 31st Dec., 1874 ...	357	486	430	389	53	50	1765
Total ...	580	639	567	822	94	76	2778

NO. 9.—TABLE SHOWING THE RELIGION OF CHILDREN IN THE INDUSTRIAL AND REFORMATORY SCHOOLS ON
31ST DECEMBER, 1874.

Schools.	Denominations.										
	Church of England.	Roman Catholics.	Presby- terians.	Wesleyans.	Baptists.	Pro- testants.	Inde- pendents.	Lutherans.	Bible Christians.	Jewish.	Total.
INDUSTRIAL SCHOOLS.											
Melbourne	18	17	2	1	...	10	...	...	...	...	48
Sunbury	139	225	34	23	...	95	1	1	...	...	518
Ballarat	73	49	22	7	2	33	...	1	...	...	187
Geelong	47	93	9	...	...	14	1	...	1	...	165
Sandhurst	38	62	11	8	1	26	...	...	...	...	146
Naval Training Ship	90	133	25	9	1	52	3	...	...	...	313
Abbotsford Industrial	...	167	...	...	...	...	...	...	...	...	167
Geelong Convent Industrial	...	25	...	...	...	...	...	...	...	...	25
Total of Industrial Schools	405	771	103	48	4	230	5	2	1	...	1569
REFORMATORY SCHOOLS.											
Boys' Reformatory	35	61	12	12	2	22	1	1	...	1	147
Girls' Reformatory	10	...	3	1	...	6	...	...	...	...	20
Abbotsford Reformatory	...	29	...	...	...	...	...	...	...	...	29
Total of Reformatory Schools	45	90	15	13	2	28	1	1	...	1	196
Total	450	861	118	61	6	258	6	3	1	1	1765

No. 11.—TABLE SHOWING PARTICULARS OF THE CHILDREN BOARDED-OUT, AND THE REPORTS OF THE COMMITTEES AS TO THEIR CONDUCT, TREATMENT, &c.

1. *Children Out, Placed Out, Returned, Absconded, Died, Transferred, &c.*

Number of children out on 1st January, 1874 - - - -	565	Returned—	
Number and ages of children placed out during the year 1874—		Given up by foster parent - -	1
Under 1 year - - - -	1	Boarded-out in error - - -	1
„ 7 years - - - -	138	Thieving - - - -	1
„ 10 „ - - - -	63	Subject of indecent assault -	2
„ 12 „ - - - -	12	Intractable - - - -	1
„ 13 „ - - - -	3	In exchange - - - -	1
—	217	Bad conduct - - - -	2
Transferred from other districts -	19	At mother's request - - -	2
Total - - - -	801	Being coloured children - -	1
Returned—		Foster parent insane - - -	4
Discharged - - - -	32	Payment ceased - - - -	5
Transferred - - - -	2	Sickness in foster parent's house	1
Sick - - - -	16	Absconded - - - -	3
Foster parent leaving district -	8	Died—	
Pay insufficient - - - -	9	Diarrhœa - - - -	2
Untruthful - - - -	2	Cerebral effusion from suppressed	
Foster parent neglectful - - -	1	measles - - - -	1
Discovered by mother - - -	16	Measles - - - -	1
Weakminded - - - -	1	Whooping cough - - - -	1
Unruly - - - -	1	Congestion of the brain and con-	
For licence - - - -	1	vulsions - - - -	1
		Dysentery after measles - -	1
		Dysentery during teething -	1
		Transferred to other districts -	19
		Total - - - -	153

2. *Reports of the Condition, Treatment, &c., of Children Remaining with Foster Parents on 31st December, 1874.*

Number remaining on 1st January, 1875 - - - -	648	Not attending church—Sick - -	26
Condition and Treatment—		Too young - - - -	85
Clean - - - -	648	Attending Sunday-school - -	537
Healthy - - - -	622	Not attending Sunday-school—Sick	26
Not healthy - - - -	26	Too young - - - -	85
Well clothed - - - -	648	Attending day-school - - -	535
Well-behaved - - - -	648	Not attending day-school—Sick -	26
Sleeping accommodation sufficient	648	Too young - - - -	85
Attending church - - - -	537	School closed - - - -	2

No. 12.—TABLE SHOWING THE OCCUPATION OF THE CHILDREN IN THE INDUSTRIAL AND REFORMATORY SCHOOLS UNDERMENTIONED DURING 1874.

Schools.	Actual Number Employed.	Employment.														Average Number Employed.			
		Household Work.	Cooks.	Laundry.	Cutting-room.	Machine-room.	Seamstresses.	Monitors.	Dairy, Garden, and Farm.	Tailors.	Blacksmiths.	Carpenters.	Butchers.	Shoemakers.	Bakers.		Gardeners.	Ship Duty.	Other Government Departments.
Melbourne	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	91
Sunbury	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	161
Ballarat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62
Geelong	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42
Naval Training Ship	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166	-	183
Reformatory (Boys')	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	-	61
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	600

No. 13.—TABLE SHOWING THE ESTIMATED VALUE OF THE INMATES OF THE UNDERMENTIONED INDUSTRIAL AND REFORMATORY SCHOOLS DURING THE YEAR 1874.

Months.	Melbourne.	Sunbury.	Geelong.	Ballarat.	Reformatory.	Nelson.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
January	155 10 0	248 18 2	45 8 9	58 19 4	65 5 1	188 19 6	763 0 10
February	135 13 11	215 11 1	36 10 2	46 8 7	51 3 3	129 17 6	615 4 6
March	131 19 1	214 19 8	27 14 0	49 19 11	59 8 6	104 19 0	589 0 2
April	120 18 0	194 3 10	36 13 8	45 3 7	58 5 9	123 11 6	578 16 4
May	166 10 10	252 9 8	39 4 2	60 9 11	67 8 6	154 10 6	740 13 7
June	123 9 3	196 12 11	33 5 10	53 8 7	56 10 11	120 17 6	584 5 0
July	75 0 10	200 10 5	35 13 5	48 19 1	46 5 7	107 10 0	513 19 4
August	74 15 2	242 3 11	65 19 5	65 17 8	74 17 6	140 10 6	664 4 2
September	55 1 3	223 13 0	57 3 2	54 5 3	60 4 0	124 9 6	574 16 1
October	60 13 5	183 1 2	61 7 1	66 8 2	65 9 7	134 7 6	571 7 1
November	47 19 11	165 9 9	49 17 6	63 3 0	56 10 6	143 0 0	526 0 8
December	39 17 3	233 4 4	45 3 9	58 6 7	55 17 0	134 10 6	566 19 4
Total	1187 8 11	2570 17 11	534 0 11	671 9 8	717 6 2	1607 3 6	7288 7 1

**No. 14.—LIST OF ARTICLES MANUFACTURED IN THE UNDERMENTIONED
INDUSTRIAL AND REFORMATORY SCHOOLS DURING THE YEAR 1874, AND
THE ESTIMATED VALUE OF THE LABOR EMPLOYED IN THEIR MANUFACTURE.**

Description of Articles.	Manufactured at—						Total.	Rate.		Amount.		
	Snbry.	Melb.	G'long.	Ball'rt.	Refor.	Nel.		s.	d.	£	s.	d.
Aprons	83	100	...	48	8	—	239	0	2	1	19	10
Awnings ... ..	...	...	1	...	...	—	1	5	0	0	5	0
Bags, Clothes	2	...	...	...	...	—	2	0	3	0	0	6
Bags, for School Bks. ... ..	...	...	...	...	138	—	138	0	2	1	3	0
Bed Ticks	94	3	99	53	32	—	281	1	0	14	1	0
Belts, Boys' Leather	414	...	...	...	34	—	448	0	3	5	12	2
Blinds, Window ... ..	...	...	13	...	...	—	13	0	2	0	2	0
Bodices	110	...	...	...	...	—	110	0	6	2	15	0
Bolsters ... ..	...	...	...	11	...	—	11	0	3	0	2	9
Bonnets, Sun	40	...	253	145	...	—	438	0	3	5	9	6
Boots	1578	...	...	...	714	—	2292	3	0	343	16	0
Caps	674	...	...	...	8	—	682	0	9	25	11	6
Chemises	166	219	169	449	...	—	1003	0	8	33	8	8
Cloths, Pudding	113	33	30	...	12	—	188	0	1	0	15	8
Cloths, Butchers'	1	...	...	...	...	—	1	0	1	0	0	1
Collars, Linen ... ..	...	38	...	62	...	—	100	0	2	0	16	8
Collars, Linen ... ..	...	...	51	...	...	—	51	0	1	0	4	3
Conduct Badges	240	...	...	...	...	—	240	0	3	3	0	0
Drawers	74	160	256	269	...	—	759	0	8	25	6	0
Drawers ... ..	...	...	...	...	7	—	7	1	0	0	7	0
Dresses, Wincey, &c.	109	254	395	414	...	—	1172	1	6	87	18	0
Eye Shades ... ..	...	...	84	...	...	—	84	0	0 ¹ / ₂	0	3	6
Flannels	391	...	...	...	154	—	545	1	0	27	5	0
Flannels	278	56	...	105	...	—	439	0	6	10	19	6
Frocks, Serge	150	...	...	...	...	—	150	2	6	18	15	0
Gowns, Night	281	256	168	303	...	—	1008	0	9	37	16	0
Handkerchiefs	469	385	468	75	...	—	1397	0	1	5	16	5
Hats, Trimming	3	...	...	...	...	—	3	0	3	0	0	9
Hats, Trimming	18	150	347	42	...	—	557	0	2	4	12	10
Inverness Capes	6	...	...	...	...	—	6	5	0	1	10	0
Jackets, Winceys	61	307	363	292	...	—	1023	0	6	25	11	6
Jackets, Cloth ... ..	...	24	...	...	...	—	24	0	10	1	0	0
Jumpers	820	...	...	...	350	—	1170	4	6	87	15	0
Jumpers ... ..	...	...	...	41	...	—	41	0	8	1	7	4
Laces, Leather gross	86	...	...	...	11	—	97	1	0	4	17	0
Napkins ... ..	...	157	80	...	...	—	237	0	2	1	19	6
Neckerchiefs ... ..	...	...	...	...	388	—	388	0	1 ¹ / ₂	2	8	6
Petticoats	105	403	201	229	...	—	938	1	0	46	18	0
Pillow Slips ... ..	...	...	...	70	...	—	70	0	6	1	15	0
Pillow Ticks ... ..	...	...	108	...	...	—	108	0	2	0	18	0
Pillow Ticks ... ..	...	...	...	...	30	—	30	0	6	0	15	0
Pinafores	9	653	395	1049	...	—	2106	0	4	35	2	0
Peel for Baker	1	...	...	...	...	—	1	3	6	0	3	6
Scrapers and Hook	3	...	...	...	...	—	3	1	0	0	3	0
Sheets ... ..	...	...	...	88	6	—	94	0	2 ¹ / ₄	0	17	7 ¹ / ₂
Shirts, Infant, Flannel ... ..	...	26	...	...	...	—	26	0	3	0	6	6
Shirts, Infant, Calico ... ..	...	37	...	...	...	—	37	0	2	0	6	2
Shirts, Twill	49	8	...	161	402	—	620	1	0	31	0	0
Shoes, Boys' ... ..	...	...	...	...	12	—	12	2	6	1	10	0
Shoes, Horse	86	...	...	...	...	—	86	0	9	3	4	6
Slippers ... ..	...	...	...	...	1	—	1	2	0	0	2	0
Squares, Flannel ... ..	...	31	...	...	...	—	31	0	3	0	7	9
Table Cloths ... ..	...	...	...	3	...	—	3	0	2	0	0	6
Towels	56	...	154	101	8	—	319	0	1	1	6	7
Trousers	899	...	...	...	403	—	1302	2	0	130	4	0
Trousers	281	...	...	...	...	—	281	2	6	35	2	6
Vests	1045	...	...	...	272	—	1317	2	0	131	14	0
Window Openers	6	...	...	...	...	—	6	1	0	0	6	0
										1206	15	0 ¹ / ₂

No. 15.—TABLE SHOWING THE QUANTITIES OF FARM AND DAIRY PRODUCE OBTAINED AT THE UNDERMENTIONED INDUSTRIAL AND REFORMATORY SCHOOLS, FROM 1ST APRIL, 1874, TO 31ST MARCH, 1875.

Articles.			Sunbury.	Rate.	Ballarat.	Rate.	Reformatory.	Rate.	Amount.
									£ s. d.
Butter	...	lb.	3537	1s.	469 $\frac{1}{4}$	1s.3d.	...	...	206 3 7
Eggs	...	doz.	80 $\frac{2}{3}$	1s.6d.	...	...	...	...	6 1 0
Milk	...	qrt.	61,690	2d.	11,378	4d.	...	...	703 14 4
Onions	...	lb.	...	...	...	...	24,560 $\frac{1}{2}$	£7 10s. p. ton	82 4 8
Onions, bnchs.	...	doz.	...	...	...	...	320	6d.	8 0 0
Mxd. Vegetables	...	lb.	45,966	1d.	8,113	1d.	29,581 $\frac{1}{2}$	1d.	348 11 9
									1354 15 4

No. 16.—TABLE SHOWING THE INCREASE AND DECREASE OF CATTLE, &c., AT THE SUNBURY, BALLARAT, AND MELBOURNE INDUSTRIAL SCHOOLS, FROM THE 1ST APRIL, 1874, TO 31ST MARCH, 1875.

Description of Animals.				On hand 1st April 1874.	Increase.			Decrease.				Amount realised by Sales.			Balance on hand, 31st March, 1875.
					Supplied.	Reared.	Total.	Killed for Food.	Died.	Sold.	Total.				
Horses	..	...	...	11	...	...	11	...	1	...	1	£	s.	d.	10
Cows, Steers, Calves, &c.	...	...	...	150	...	60	210	21	21	...	42	...	...	...	168
Bulls	...	...	...	1	1	...	2	...	...	...	...	...	...	...	2
Sheep	...	...	...	165	1549	...	1714	1499	4	...	1503	...	...	...	211
Pigs	...	...	...	102	34	61	197	...	18	91	109	132	2	5	88
Fowls	...	...	..	90	...	13	103	...	40	12	52	0	19	6	51
												133	1	11	

No. 17.—SUNBURY FARM ACCOUNT, FROM 1ST APRIL, 1874, TO 31ST MARCH, 1875.

<i>Dr.</i>				<i>Cr.</i>			
	£	s.	d.		£	s.	d.
To Produce on hand, 1st April, 1874 ...	66	0	0	By 68 Pigs sold ...	110	0	7
Live Stock, do. ...	889	10	0	12 Fowls sold ...	0	19	6
Stores, do. ...	327	3	4	11 Steers, 10 Cows killed for food ...	130	14	2
Stores supplied from 1st April, 1874, to 31st March, 1875 ...	26	7	1	61,690 quarts of Milk for Rations, at 2d. per quart	514	1	8
Wages paid ...	432	17	0	3537 lbs. of Butter, at 1s. per lb. ...	176	17	0
Rations for Farm Men ...	41	3	9	45,966 lbs. of mixed Vegetables, at 1d. per lb. ...	191	10	6
Horseshoeing and Repairs to Farm Implements ...	8	6	11	80½ dozen Eggs, at 1s. 6d. per dozen ...	6	1	0
Forage purchased ...	58	15	0	Live Stock on hand ...	906	18	3
Fuel and Light used on Farm ...	41	3	5	Stores do. ...	280	17	8
Live Stock purchased ...	17	0	0	Produce do. ...	100	0	0
Seed supplied ...	1	1	0				
Cost of Materials used in Repairs to Farm Implements ...	1	14	1				
	£1911	1	7				
Credit Balance ...	506	18	9				
	£2418	0	4		£2418	0	4

No. 18.—TABLE SHOWING THE REVENUE COLLECTED FROM THE UNDERMENTIONED SOURCES DURING THE YEAR 1874.

	£	s.	d.
Maintenance of Children ...	1750	1	2
Sale of Produce, Stock, &c. ...	875	10	4
Miscellaneous Revenue, &c. ...	139	18	1
	£2765	9	7

No. 19.—TABLE SHOWING THE COST PER HEAD FOR MAINTENANCE OF CHILDREN IN THE INDUSTRIAL AND REFORMATORY SCHOOLS IN 1874.

Schools.																					
Melbourne.		Sunbury.		Reformat'y.		Geelong.		Ballarat.		Nelson.		Sandhurst.		Abbotsford.		St. Joseph's.		B'rding-out.		Licenses.	
156		540		127		168		172		321		132		198		31		621		629	
£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
8	1 10½	6	11 0¾	6	14 0¼	6	2 0	7	2 7	7	15 4¾	1	7 7¼	0	3 7¾	0	2 0½	0	16 3¾	3	10 1½
2	4 5¾	1	1 4¾	2	4 3	1	19 5½	3	1 3¼	2	14 10¾	...	...	...	...	...	...	...	...	...	...
4	10 6¼	1	14 6¾	1	12 1¾	2	1 11½	2	4 6	1	11 2	...	...	...	...	...	...	...	...	...	...
1	19 11½	0	15 8¾	1	0 4	0	16 6	0	14 11½	2	13 0¼	...	...	...	...	...	...	...	...	...	...
1	0 10¼	0	2 1	0	0 4¼	2	2 1¼	0	7 7¾	0	0 1	...	...	...	...	...	...	...	...	...	...
0	0 8¼	0	4 10	0	0 9¾	0	13 9	0	10 10¾	0	1 7	...	...	...	...	...	...	...	...	...	...
0	11 4½	0	1 1¾	0	2 6¼	1	6 7½	0	3 11¼	0	1 5½	...	...	...	...	...	...	...	...	...	...
7	17 5¾	5	8 2½	8	0 7¼	5	19 5	5	13 5¾	...	...	...	...	...	...	...	...	...	...	...	...
0	14 9	1	7 3	1	9 11	1	5 8½	1	8 1¾	1	6 1½	...	...	...	...	...	...	...	...	...	...
0	4 7¾	1	8 8	2	5 11¾	0	8 8¼	0	8 5¾	...	...	17	12 5¾	12	12 3¼	11	11 1¼	18	16 5¾	...	...
...
27	6 7½	18	14 11¼	23	10 11¼	22	16 2½	21	15 10¾	16	3 8¾	19	3 10½	12	15 11	11	13 1¾	19	13 7¾	3	10 3½
0	11 10½	...	...	...	...	0	5 5½	...	...	0	5 11¼	...	...	0	0 6¾	...	...	...	...	...	...
0	0 5¼	0	1 4½	0	1 1	6	11 6½	0	12 3½	0	0 2¼	...	...	...	...	...	...	...	...	...	...
27	18 11¼	18	16 3¾	23	12 0¼	29	13 2½	22	8 2¼	16	9 10¼	19	3 10½	12	16 5¾	11	13 1¾	19	13 7¾	3	10 3½
0	14 2¼	0	14 2¼	0	14 2¼	0	14 2¼	0	14 2¼	0	14 2¼	0	14 2¼	0	14 2¼	0	14 2¼	0	14 2¼	...	...
...	...	0	6 1	0	9 8¼	...	...	0	0 11¼	...	...	...	...	...	...	...	...	...	...	...	...
2	2 0½	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
7	6 6½	0	3 5¾	0	2 4	...	...	0	0 9½	0	0 8	...	...	...	...	...	...	...	...	...	...
0	2 3½	1	6 6¼	0	11 5¼	0	1 7¾	0	5 1¼	0	0 8¼	...	...	...	...	...	...	...	...	...	...
0	16 11¼	0	0 1½	0	0 1½	0	0 1½	0	0 1½	0	0 1½	...	...	...	...	...	...	...	...	...	...
16	16 11¼	16	5 11	21	14 3	28	17 3	21	7 0½	15	14 2¼	18	9 8¼	12	2 3½	10	18 11½	18	19 5½	3	10 3

* Cost of Clothing 325 children.

THE MELBOURNE HOSPITAL.

The Melbourne Hospital has been in existence 27 years.

Exclusive of bequests, the ordinary receipts for the year 1875 on account of the maintenance fund have amounted to £5321 2s. 2d., in addition to which the sum of £2357 9s. 9d. has been received from the committee of management of the Hospital Sunday fund. These, together with the votes of the Legislature of £15,000, make a total of £22,679 1s. 11d.

The expenditure for the year has amounted to £22,370 17s. 10d., which with the debit balance of £2962 19s. from the previous year, make a total of £25,333 16s. 10d. The building fund had at the commencement of the year a credit balance of £1721 7s. 2d.; this sum has been augmented by subscriptions and donations amounting to £834. The expenditure for sundry alterations and improvements to the out-patients' department and other parts of the building has been £264 16s. 3d., leaving a balance in hand of £2290 10s. 11d., which the Committee propose to expend upon the erection of new laundry and other works which are urgently required. The balance to the credit of the endowment fund at the date of the last report was £3449 16s. 5d.

The number of cases treated during the year is 26,037; of this number 22,130 received treatment as out-door patients and casualties, and 3907 were received into the hospital. Of these, 3059 have been discharged cured or relieved, 535 have died, and 313 remained in the Institution on the 31st December.

NUMBER OF IN AND OUT PATIENTS TREATED IN THE RESPECTIVE YEARS FROM THE FOUNDATION OF THE HOSPITAL.

Year.	In-Patients.	Out-Patients.	Total.	Year.	In-Patients.	Out-Patients.	Total.
1848	89	98	187	1862	2,828	13,297	16,125
1849	183	123	306	1863	2,443	15,622	18,065
1850	189	134	323	1864	2,724	15,285	18,009
1851	222	159	381	1865	2,913	19,049	21,962
1852	468	170	638	1866	2,541	16,741	19,282
1853	1,423	325	1,748	1867	2,790	15,736	18,526
1854	1,460	1,704	3,164	1868	2,904	19,727	22,631
1855	1,449	2,700	4,149	1869	3,335	19,342	22,677
1856	1,550	3,393	4,943	1870	3,434	21,112	24,546
1857	1,683	3,903	5,586	1871	3,476	21,322	24,798
1858	2,013	4,200	6,213	1872	3,303	20,299	23,602
1859	2,673	8,337	11,010	1873	3,726	21,640	25,366
1860	3,296	8,223	11,519	1874	3,907	22,130	26,037
1861	3,970	11,679	15,649				
				Total	60,992	286,450	347,442

OBJECT.

1. The object of the Melbourne Hospital is to afford medical and surgical aid to poor persons requiring it, and for casualties; but no person who is found able to pay for aid receives further than temporary assistance.

PRIVILEGES OF CONTRIBUTORS AND HONORARY BENEFACTORS.

2. Every Contributor of £1 per annum, and every Contributor of not less than £20 in one donation, is entitled to one vote at all general

meetings, and to recommend four out-patients in every year; and every Contributor of £5 per annum, and every Contributor of £100 in one donation, is entitled to two votes, and to nominate two in-patients and twelve out-patients in every year; and every Contributor of £10 per annum, and every Contributor of £200 in one donation, is entitled to three votes, and to nominate four in-patients and twenty out-patients in every year.

3. *a.* Every person who pays to the Institution, in one year, in one sum, collections to the amount of £50 or upwards, is enrolled as an honorary Contributor, and as such is entitled to one vote at all elections, and to recommend one in-patient and four out-patients in every year.

b. Every public or corporate body which contributes the sum of £5 annually is authorised to nominate some one person to be enrolled as a Contributor, who is entitled to one vote at all elections, and to recommend one in-patient and ten out-patients in every year; and if the contribution amount to £20 per annum, such nominee is entitled to two votes at all elections, and to recommend two in-patients and twenty out-patients in every year.

c. Every executor first-named in any will, who pays to the Institution the sum of £100, is enrolled as honorary Governor, and is entitled to recommend one in-patient and four out-patients in every year, but not to vote.

d. Every Contributor (being absent from the colony) may, by power of attorney, duly executed, and approved by the Committee, exercise all the privileges to which he would be entitled if personally present.

4. Every yearly subscription is paid in advance, and every first yearly payment is calculated from the date of such payment, but no such first yearly payment entitles to a vote at a general meeting within three months from the date of such payment.

5. The privileges of annual Contributors are suspended until all arrears are paid.

6. Every firm or partnership becoming Contributors exercise their privileges through some one member of the same.

7. Persons who have conferred any signal benefit on the Hospital, irrespective of subscription, may be elected honorary Contributors at any general meeting, on the recommendation of the Committee of Management, who are entitled to recommend one in-patient and five out-patients in every year, but have not the right of voting.

ADMISSION OF IN-PATIENTS AND OUT-PATIENTS.

52. Patients are admitted on Tuesdays and Fridays, at half-past eleven o'clock.

53. All sick persons are admissible as in-patients on the recommendation of a Contributor, provided they appear to the Committee of Management as proper objects of charity, and that the physician or surgeon of the week reports that they are likely to receive benefit by treatment in the Hospital.

54. Accidents and cases of emergency are at all times admissible without letters of recommendation, where delay might prove dangerous.

55. The Committee may admit articulated seamen on payment of 25s. per week, or in that proportion, on the order of the Shipping Master of the Port, countersigned by the Captain or Agent of the Vessel, in accordance with an agreement made with the Government.

56. No lunatic, or person having the small-pox, or person suffering from chronic epilepsy, or from ulcerated legs of long standing, or pregnant female for the purpose of confinement, or person whose case might be equally relieved as an out-patient, shall be deemed to be a proper case for admission as in-patient.

57. Whenever the applications for admission are more than can be accommodated in the house, the most urgent cases only will be admitted.

Resolution passed by the Committee of Management of the Melbourne Hospital, October 4, 1859.

“The Committee of Management of the Melbourne Hospital, having had brought under its notice the establishment of a fund, to be called the Convalescent Fund, for the purpose of affording casual relief to destitute patients in certain cases, and also for providing change of air in cases of convalescence, is of opinion that such a fund would be a valuable auxiliary in aid of the main object of the institution, and should be administered by the Committee of Management.”

RULES FOR THE CONVALESCENT FUND.

1. Donations and subscriptions in aid of a fund, to be called the Convalescent Fund, are receivable by the Treasurer or the Collectors.

2. A separate account of this fund shall be kept at the bank and in the books of the institution.

3. The administration of this fund shall be placed under the charge of the Committee of Management, subject to the regulations hereinafter provided.

4. Recommendations for the benefit of this fund will be received by the Committee of Management from the Medical Staff and members of the Committee.

5. The Convalescent Fund will be applied by the Committee of Management towards the following objects:—

(1.) To defray the expenses of patients going to the sea-side or the country, and, when necessary, of boarding them.

(2.) To the purchase of clothing.

(3.) To defray the expenses of removing patients to their homes.

(4.) To supplying small sums of money to patients leaving the house, to assist in maintaining them until they are able to return to their ordinary work.

(5.) To providing, wholly or in part, trusses, or other surgical instruments or appliances, for persons unable to provide themselves with the same.

FORM OF BEQUEST WHICH MAY BE INTRODUCED INTO A WILL.

I bequeath to the Treasurer for the time being of the Melbourne Hospital in aid of that institution the sum of £ , for which the receipt of such Treasurer shall be sufficient discharge; and I direct that

the aforesaid legacy shall be paid exclusively out of such part of my personal estate as may be lawfully appropriated to such purpose and preferably to any other payment thereout.

DIET SCALE.

			Bread and Butter.	Meat.	Soup.	Potatoes.	Rice or Bread Pudding.	Beef Tea.	Arrowroot with Milk.	Tea.		
			oz.	oz.	pint.	oz.	pint.	pint.	pint.	pint.		
No. 1.												
Breakfast	...	...	3	...	...	...	...	...	...	1		
Dinner	...	...	...	...	...	...	...	...	1	...		
Supper	...	...	3	...	...	...	...	...	...	1		
No. 2.												
Breakfast	...	...	4	...	...	...	...	...	...	1		
Dinner	...	...	...	...	...	...	6	1	...	...
Supper	...	...	4	...	...	...	...	...	...	1		
No. 3.												
Breakfast	...	...	6	...	...	...	...	...	...	1		
Dinner	...	...	...	8	$\frac{1}{2}$	12	...	...	...	...
Supper	...	...	6	...	...	...	...	...	...	1		

Extras to consist of such description and quantity as the Medical Officer may direct.

Fractional parts of the above diets for women and children, as may be ordered by the Physicians and Surgeons.

STATISTICAL STATEMENT, No. 1.

1874.

DISEASES.						CASES TREATED INCLUDING DEATHS.		DEATHS.	
CLASS I.—ZYMOTIC DISEASES.						Male.	Female.	Male.	Female.
Order 1.—Miasmatic Diseases.									
1	Small Pox	...	...	...	...	—	—	—	—
1a	Chicken Pox, &c.	...	...	...	...	—	—	—	—
2	Measles	...	...	...	...	37	32	—	—
3	Scarlatina	...	...	...	...	8	21	—	—
3a	Diphtheria	...	...	...	...	4	5	2	3
4	Quinsy	...	...	...	...	18	15	—	—
5	Croup	...	...	...	...	4	2	—	1
6	Whooping Cough	...	...	...	...	3	2	—	—
7	Typhus and Infantile Fevers, Typhoid, &c.	...	...	...	...	113	84	19	15
8	Erysipelas	...	...	...	...	112	61	8	4
9	Metria	...	...	...	...	—	—	—	—
10	Carbuncle, Boil	...	...	...	...	2	3	—	—
11	Influenza, Coryza, Catarrh, &c.	...	...	...	...	13	9	—	—
12	Dysentery	...	...	...	...	34	10	3	2
13	Diarrhœa	...	...	...	...	26	13	2	1
14	Cholera	...	...	...	...	—	—	—	—
15	Ague	...	...	...	...	3	—	—	—
16	Fevers	...	...	...	...	—	—	—	—
17	Rheumatism	...	...	...	...	153	96	1	5
Others, including Mumps, Ophthalmia (purulent), Pyæmia, Hospital Gangrene, &c.						1	1	1	—

						CASES TREATED.		DEATHS.	
						Male.	Female.	Male.	Female.
<i>Order 2.—Enthetic Diseases.</i>									
1	Syphilis—Primary, Secondary, Tertiary	...	...	...	...	42	45	1	1
2	Gonorrhœa, Stricture of Urethra	...	...	...	...	55	11	4	—
3	Hydrophobia	...	...	...	...	—	—	—	—
4	Glanders	...	...	...	...	—	—	—	—
	Others, including Necusia, Malignant Pustule, &c.	...	...	...	...	1	—	1	—
<i>Order 3.—Dietic Diseases.</i>									
1	Privation	...	...	...	...	7	—	1	—
2	Want of Breast Milk	...	...	...	...	—	—	—	—
3	Papura and Scurvy	...	...	...	...	9	3	1	—
4	Alcoholism	{ <i>a</i> Del. Tremens		...	...	45	34	11	4
		{ <i>b</i> Intemperance		...	...	11	3	—	—
	Others, including Rickets, Bronchocele, Cretinism, &c.	...	...	...	...	—	—	—	—
<i>Order 4.—Parasitic Diseases.</i>									
1	Thrush...	...	...	...	...	—	—	—	—
2	Worms	...	...	...	...	—	—	—	—
2a	Hydatid	...	...	...	...	8	8	—	2
	Others, including Porrigo, Scabies, Phthei-riasis, &c.	...	...	...	...	—	1	—	—
CLASS II.—CONSTITUTIONAL DISEASES.									
<i>Order 1.—Diathetic Diseases.</i>									
1	Gout	...	...	...	...	20	7	2	—
2	Dropsy	...	...	...	...	8	18	1	—
3	Cancer	...	...	...	...	28	15	11	2
3a	Tumour	...	...	...	...	14	20	1	2
3b	Polypus	...	...	...	...	—	—	—	—
4	Noma	...	...	...	...	—	—	—	—
5	Mortification	...	...	...	...	1	2	—	1
	Others, including Bed sore, Ergotism, &c.	...	...	...	...	—	—	—	—
<i>Order 2.—Tubercular Diseases.</i>									
1	Scrofula	...	...	...	...	18	11	1	—
2	Tabes Mesenterica	...	...	...	...	—	—	—	—
3	Phthisis	...	...	...	...	166	98	76	54
3a	Hæmoptysis	...	...	...	...	9	—	3	—
4	Hydrocephalus	...	...	...	...	1	2	1	1
	Others, including Abscesses, &c.	...	...	...	...	42	24	1	1
CLASS III.—CONSTITUTIONAL DISEASES.									
<i>Order 1.—Diseases of the Nervous System.</i>									
1	Cephalitis	...	...	...	...	2	2	1	1
2	Apoplexy	...	...	...	...	22	9	12	6
3	Paralysis	...	...	...	...	44	27	4	2
4	Insanity	...	...	...	...	17	34	2	1
5	Chorea	...	...	...	...	4	9	—	—
6	Epilepsy	...	...	...	...	34	36	2	—
7	Convulsions	...	...	...	...	1	—	—	—
8	Brain Disease, &c., including Idiopathic Tetanus, Neuralgia, Ophthalmia, Nereucephalus, &c.	...	...	...	...	65	50	10	7
<i>Order 2.—Diseases of the Organs of Circulation.</i>									
1	Pericarditis	...	...	...	...	2	—	—	—
2	Aneurism	...	...	...	...	12	1	4	—
3	Heart Disease, &c., including Angina Pectoris, Syncope, Hypertrophy, &c.	...	...	...	...	68	43	38	14
<i>Order 3.—Diseases of the Respiratory Organs.</i>									
1	Laryngitis	...	...	...	...	3	—	2	—
2	Bronchitis	...	...	...	...	34	17	2	1
3	Pleurisy	...	...	...	...	44	21	9	2
4	Pneumonia	...	...	...	...	62	40	20	14

CLASS III.—Order 3.—continued.

	CASES TREATED.		DEATHS.	
	Male.	Female.	Male.	Female.
4a Congestion of Lungs, Pulmonary Apoplexy, &c.	6	3	1	3
5 Asthma	7	6	1	1
6 Lung Diseases, &c., including Epistaxis, &c.	1	6	—	—
<i>Order 4.—Diseases of the Digestive Organs.</i>				
1 Gastritis	—	1	—	1
2 Enteritis	11	5	1	—
3 Peritonitis	9	7	7	5
4 Ascites... ..	2	5	1	1
5 Ulceration of Intestines	—	4	—	—
6 Hernia	11	2	1	—
7 Ileus	38	7	1	—
8 Intussusception	—	—	—	—
9 Stricture of Intestines	—	—	—	—
10 Fistula	13	2	—	—
11 Stomach Disease, &c., including Dyspepsia, Pyrosis, Hæmatemesis, &c.	52	56	4	—
12 Pancreas Disease, &c.	—	—	—	—
13 Hepatitis	24	21	6	7
14 Jaundice, Gallstone, &c.	6	6	2	3
15 Liver Disease, &c., including Cirrhosis, &c.	5	2	—	1
16 Spleen Disease, &c.	—	—	—	—
<i>Order 5.—Diseases of the Urinary Organs.</i>				
1 Nephritis	2	1	2	—
2 Ischuria	2	1	—	—
3 Nephria (Bright's Disease)	6	6	2	1
4 Diabetes	6	3	2	1
5 Stone, Gravel	4	—	—	—
6 Cystitis	4	1	—	—
7 Others, including Prostatic Disease, Diuresis, Kidney Diseases, &c.... ..	7	2	2	—
<i>Order 6.—Diseases of the Organs of Generation, &c.</i>				
1 Ovarian Dropsy	—	2	—	—
2 Others, including Hysteritis, Orchitis, Hydrocele, &c.... ..	8	3	—	—
<i>Order 7.—Diseases of the Locomotive System.</i>				
1 Arthritis	45	20	3	2
1a Ostitis, Periostitis, &c.	19	14	—	—
2 Joint Diseases, including Caries, Necrosis, &c.	47	25	1	—
<i>Order 8.—Diseases of the Integumentary System</i>				
1 Phlegmon, Whitlow, &c.	2	—	—	—
2 Ulcer	55	50	2	3
3 Others, including Eczema, Pemphigus, Herpes, Psoriasis, Skin Diseases, &c. ...	21	15	1	1

CLASS IV.—DEVELOPMENTAL DISEASES.

Order 1.—Dev. Diseases of Children.

1 Premature Birth	1	—	1	—
2 Cyanosis	—	—	—	—
3 Spina Bifida	—	—	—	—
4 Other Malformations, including Cleft Palate, Imperforate Anus, &c.	7	7	—	—
5 Teething	—	—	—	—
6 Others	—	—	—	—

Order 2.—Dev. Diseases of Adults.

1 Paramenia, Chlorosis, &c.	—	39	—	1
2 Childbirth (see Metria)	—	9	—	1
3 Others	—	7	—	—

Order 3.—Dev. Diseases of Old People.

1 Old age	16	7	2	2
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CLASS IV.—continued.					CASES TREATED.		DEATHS.	
Order 4.—Diseases of Nutrition.					Male.	Female.	Male.	Female.
1	Atrophy and Debility	...	...	...	5	3	1	—
CLASS V.—VIOLENCE.								
Order 1.—Accidents or Negligence.								
1	Fractures and Contusions	...	...	...	487	91	37	2
2	Wounds	...	...	...	64	19	1	—
3	Burns and Scalds	...	...	...	15	22	3	3
3a	Sunstroke	...	...	...	9	4	1	—
4	Poison	...	...	...	2	5	—	1
4a	Bite of Snake or Insect	...	...	...	1	—	—	—
5	Drowning	...	...	...	—	—	—	—
6	Suffocation	...	...	...	—	—	—	—
7	Other or unknown Accident	...	...	...	4	—	2	—
Order 3.—Homicide.								
Order 4.—Suicide.								
1	Wounds	{ Gunshot	...	...	—	—	—	—
		{ Cut, Stab, &c.	...	...	4	4	1	—
2	Poison	...	...	...	4	2	2	—
3	Drowning	...	...	...	—	1	—	—
4	Hanging	...	...	...	—	—	—	—
5	Otherwise	...	...	...	—	—	—	—
	Sudden Deaths (cause unascertained)	...	...	...	—	—	—	—
	Diseases or Deaths from causes not specified or ill-defined	...	...	...	1	2	—	—
Total					2463	1444	349	186

SANITARY REGULATIONS.

[FROM INFORMATION FURNISHED BY E. G. FITZGIBBON, ESQ.]

A quarantine law is in force to prevent the introduction of disease from over sea, and at Queenscliff, at the entrance to Port Phillip Bay, and at each of the outports a medical officer is stationed to board and examine incoming ships before giving *pratique*.

For internal sanitary protection, an Act of the local Parliament relating to public health, places the colony under the care of a central Board of Health, presided over by the chief medical officer of the colony, and composed of six other members, either medical or lay, appointed by the Government. Under general subordination to this board, the local governing body of the city of Melbourne, and of every other municipal city, town, district, and shire in the colony is constituted a local board of health, and empowered and directed to enforce cleanliness in and about dwellings, to compel the abatement of nuisances upon private property, to provide for the cleansing of streets and public places, to provide and improve parks and recreation grounds, baths, wash-houses, and other means for public health and convenience; to prevent the sale of unwholesome meat and other provisions, whether solid or liquid; to license, inspect, and regulate common lodging-houses; to regulate the slaughtering of animals, and the carrying on of noxious trades, and generally to exercise active supervision over all matters affecting the

sanitary condition of the locality. For purposes of statistical record and comparison each local board reports annually to the central board, and that again to the Parliament.

The number of municipal corporate councils constituted as such local boards of health is at present 163. Their jurisdiction covers the entire area of the colony, and their sanitary powers and functions are amongst those most used and valued by them.

Of parks and recreation grounds, there are in Melbourne and its vicinity a total of upwards of 2700 acres; upon 564 acres of these, which are within the city limits, an expenditure of upwards of £6000 per annum is made jointly by the central Government and the City Council in maintenance and improvements. Other centres of population are likewise liberally provided with parks and recreation grounds, and extensive parks in different parts of the colony have been reserved as State forests.

Amongst the sanitary regulations of Melbourne may be classed the provisions of the Melbourne Building Act, which, in a modified form, are adopted in some of the other incorporated towns. These have for their object the prevention of injury to life and property from falling houses and from fire. They prescribe the thickness and materials of walls, which, when houses are attached or in proximity to others, must be of stone or brick, with roofs of slate or iron, or other un inflammable material; and each house must have external or party walls carried above the roof. These provisions, and the abundant supply and high pressure of the water from Yan Yean, which can be thrown over the tops of the highest buildings by mere hydrant and hose, cause fires to be of rare occurrence, and confined to the buildings in which they originate.

Of sanitary works, the most important are those for water supply, amongst which the most notable is the Yan Yean Reservoir, whence the metropolitan district receives its supplies. Distant 19 miles from Melbourne, this reservoir is an artificial lake, with a surface of more than two square miles, and depth at greatest of 25, and average of 18 feet, storing about 6,400,000,000 gallons, obtained from a drainage area of about 45,000 acres, at an altitude of 595 feet above the city, and delivering by gravitation at high pressure, first to a smaller reservoir, at Preston, about 6 miles from Melbourne, and thence through the reticulation of the city and suburbs. It was formed by the building of an embankment, 1053 yards long, and 30 feet high, across a dip between two hills, which gave outlet for the watershed of the district. The scheme was planned by Mr. James Blackburn, the city surveyor of Melbourne, and carried out by Mr. M. B. Jackson, under a board of Government commissioners. The work was begun in 1854, and the supply of water to the city commenced in 1857. Its aggregate cost to date is stated to be £1,334,000, and it has yielded to date a return of a little less than £1,000,000 in water rates. The water rate to householders for domestic purposes is 8d. in the pound upon the municipal assessment, and the rate for consumption by meter, 1s. per 1000 gallons. Other cities, towns, and districts are supplied from reservoirs since constructed, with an aggregate storage of 5,637,819,222 gallons, and of which the aggregate estimated cost is £1,249,665.

RETREAT FOR THE CURE OF INEBRIATES, NORTHCOTE.

[FROM INFORMATION FURNISHED BY DR. MACARTHY.]

This institution was opened for male patients in October, 1873, and for female patients, October 1874. There is as yet accommodation built for only 11 males and 3 females. 52 patients have been received, and the majority, as far as can be ascertained, are doing well. The Retreat is supported by grants from Parliament, by donations from the public, and by payments made by the patients; the latter by Government regulation is not to exceed £3 per week for each patient; some have been received for less, others gratuitously. When the accommodation is extended the institution will be made self-supporting at rates lower than what must be charged at present. This Retreat was established under the 36th Victoria, No. 449, called "The Inebriates Act, 1872." There are two modes of admission under the Act, the *voluntary* and the *compulsory*; by the voluntary any inebriate may go before any justice of the peace in private, and gain his consent; by the compulsory, any relative or friend may summon the inebriate before a County Court Judge, and produce declarations signed by two medical men, that the patient needs curative treatment in a Retreat; the period during which the justice or judge can commit must not exceed twelve months. A few have been received without either form, when it appeared evident to the Superintendent that the patient would voluntarily remain during the stipulated time. There is a fine garden and thirty acres of land connected with the Retreat, the only restraint on the patients is that they are not allowed without leave to go outside the farm boundary. There are four Government visitors who visit and report frequently; the establishment is managed by a committee and trustees, but the medical superintendent has the entire control and administrative management of the Retreat, and is accountable for its discipline. Patients generally are allowed a little brandy during the first few days, seldom so long as a week. Alcohol, tobacco, and opium are strictly forbidden. All letters to patients are sealed and enclosed in another envelope directed to the Superintendent. The Retreat is four miles north-east of Melbourne, on the Merri Creek.

THE MODEL LODGING HOUSE.

A movement for providing proper and cleanly accommodation at a low price for the large number of poor persons, who, without houses of their own, and without means to pay for lodgings of the higher sort, were obliged to put up with the scanty accommodation afforded them in the cheap lodging houses of the city, which were notorious for dirt, overcrowding, and want of ventilation, was set on foot in this city in the year 1871. The desirability of eliminating the eleemosynary element from the scheme was at once recognised, and it was determined to start a company on purely commercial principles, with the view of erecting a Model Lodging House on the plan indicated.

Steps were accordingly taken to form a company, having a capital of £5000, in 400 shares of £12 10s. each, which was registered under the "Companies Statute, 1864," and the shares were most readily taken up by the most influential residents of the city. It will, however, be seen from the expenditure shown below that the capital subscribed was insufficient to meet the expenditure in building the house, and paying the price of the land, and that it was therefore necessary to borrow an additional sum of £4000 on mortgage, which was arranged for on very favourable terms.

The company having determined to build their Model Lodging House in a position where such was urgently wanted, made application to the Government for a site in King-street (between Little Collins-street and Bourke-street), and the same was at once granted, and instructions were given to put it up to public sale on the 17th June, 1873, when the company became the purchasers of 69 feet 4 inches frontage to King-street, with a depth of 200 feet, for the sum of £1737 18s. 11d.

The total cost of the original building, with additions thereto to the present time, amounts to £6291 5s. 6d.

The house (the foundation of which was laid on 16th October, 1872), consists of three stories, with outside offices, consisting of swag-room, smoking-shed, large swimming bath, superintendent's kitchen and kitchen for lodgers, with closets and urinals. The internal accommodation of the house consists of office, sitting and bedroom for superintendent and matron, large day reading-room for inmates, and beds for 188 at 6d. per night, 27 at 9d., and 8 at 1s. On each story there are ample lavatories, with towels and combs. There is also a well supplied library, besides daily newspapers, and several kinds of games provided for the use of the lodgers.

The total cost of furnishings down to the present time amounts to £1380 16s. 1d.

We are happy to state that since the house was opened on 1st September, 1873, to 20th July, 1875, 117,296 persons have availed themselves of the accommodation afforded them in the Lodging House.

Salaries, wages, gas, firewood, rates, books, stationery, insurance, washing, and other indoor expenses have amounted during the same period to £1995 10s. 9d.

It may be mentioned that a kitchen with the necessary appurtenances is provided for the mess, to enable them to cook their own victuals if so inclined.

It will be seen that the establishment of the Model Lodging House has proved a very great success in so many having taken advantage of its accommodation, and it is hoped that within a few months the shareholders will reap the benefit of their philanthropic speculation.

FRIENDLY SOCIETIES.

Numerous Friendly Societies are in existence in Victoria, some of them being off-shoots of English associations, and some being exclusively of colonial origin. The chief objects of these institutions are to afford alimment and medical attendance in sickness and sums of money at death.

The following table shows, so far as the particulars can be ascertained, the names of the various Societies, the number of Lodges or Courts, and the number of members in each :—

Name of Friendly Society.	Number of Lodges, Courts, &c.	Number of Members.
Manchester Unity Independent Order of Odd Fellows - - - - -	154	12,968
Independent Order of Odd Fellows - - - - -	41	2,100
Grand United Order of Odd Fellows - - - - -	53	2,587
Ancient Order of Foresters - - - - -	133	10,843
United Ancient Order of Druids - - - - -	39	2,164
Independent Order of Rechabites - - - - -	161	6,223
Sons of Temperance - - - - -	64	1,982
Daughters of Temperance - - - - -	10	223
Order of St. Andrew - - - - -	26	1,962
Order of St. Andrew—Scottish Constitution - - - - -	15	755
Melbourne St. Andrew's Society - - - - -	1	75
St. Patrick's Society - - - - -	8	777
Hibernian Australian Catholic Benefit Society - - - - -	57	3,526
Grand United Order of Free Gardeners - - - - -	6	204
Protestant Alliance - - - - -	23	1,400
Australian Natives' Association - - - - -	4	174
United Labourers - - - - -	1	79
Melbourne and Hobson's Bay United Railway Co.'s Servants' Benefit Society - - - - -	1	342
Wesleyan Local Preachers' Association - - - - -	1	45
German Sick and Relief Society - - - - -	1	122
Daylesford Seamen's Mutual Benefit Society - - - - -	1	19
St. Mary's Total Abstinence Benefit Society - - - - -	1	97
Independent Order of Shepherdesses - - - - -	1	32
Ancient Order of Royal Foresters - - - - -	7	255
Ancient Order of Shepherds - - - - -	7	140
Victorian Independent Sick Benefit Society - - - - -	1	No information.
Australasian United Order of Musicians - - - - -	1	No information.
Independent Order of Shepherds - - - - -	1	20
Total - - - - -	819	49,114

These societies are regulated under a Statute, and each society is required to send to the Government yearly returns of its operations under certain prescribed forms, but in the absence of any penalty under the Act in the event of returns not being furnished, this provision is in many cases not complied with.

Assuming, however, the number of members to be 50,000, and there is little doubt but that this is an under estimate, and the number of dependants of each member to be four on the average, it follows that no less than 250,000 persons, or nearly a third of the population of the colony, are directly interested in the success and solvency of these institutions.

The following table gives the income, expenditure, and assets and liabilities of such Friendly Societies as furnished returns for the year 1874 :—

Name.						£	s.	d.
Contributions :—								
To Sick and Funeral Fund	-	-	-	-	-	48,642	15	8
To Incidental or Management Fund	-	-	-	-	-	58,497	5	0
Initiation or Entrance Fees	-	-	-	-	-	5,708	4	9
Interest received from investment	-	-	-	-	-	11,095	9	6
Receipts from all other sources	-	-	-	-	-	14,090	9	5
Total	-	-	-	-	-	138,034	4	4

EXPENDITURE.

Amount paid for—						£	s.	d.
Aliment in Sickness	-	-	-	-	-	37,423	19	10
District Funeral Fund	-	-	-	-	-	8,879	4	8
Funeral Donations	-	-	-	-	-	5,819	16	0
Medical Attendance and Medicines	-	-	-	-	-	40,579	12	7
Expenses of Management	-	-	-	-	-	13,413	13	6
Other Expenses	-	-	-	-	-	16,311	8	2
Total	-	-	-	-	-	122,427	14	9

ASSETS.

Amount to Credit of Funds—						£	s.	d.
Sick and Funeral Fund	-	-	-	-	-	253,016	5	1
Management Fund	-	-	-	-	-	13,056	8	1
Total	-	-	-	-	-	266,072	13	2
Amount Invested	-	-	-	-	-	225,217	8	7
Other Assets	-	-	-	-	-	40,917	17	1

LIABILITIES.

Total Liabilities	-	-	-	-	-	£	s.	d.
						3,317	0	11

The following is a statement of the experience of sickness, mortality, etc., of such societies as furnished returns for 1874 :—

Number of Lodges or Courts	-	-	-	-	-	710
Mean number of Members during the Year	-	-	-	-	-	42,664
Number of Members who died during the Year	-	-	-	-	-	395
Number of Cases of Sickness during the Year	-	-	-	-	-	8,262
Time for which aliment was allowed during the Year—						
Total	-	-	-	-	-	45,964 weeks 4 days
Average to each Member	-	-	-	-	-	6.5 days
Number of Registered Wives	-	-	-	-	-	25,648
Number of Registered Wives who died during the Year	-	-	-	-	-	227

A Royal Commission is now sitting for the purpose of inquiring into the position of Friendly Societies, and it is expected that the results of its labours will shortly be laid before Parliament.

HENRI J. HART, Chairman.

CLASS 342.—The dwelling. Sanitary conditions and regulations.
Domestic architecture.

Dwellings characterised by cheapness, combined with the conditions essential to health and comfort.

Fire-proof structures.

Hotels, club-houses, &c.

Public baths.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1557 Patent Ceiling Ventilator, with ornamental centre-piece.

1558 Model of Victorian Bush Residence, with Huts and various kinds of Fencing used in Australia.

CLASS 344.—Money. Mints and coining.

Collections of current coins.

Historical collections.

Tokens, &c.

Bank notes, and other paper circulating mediums.

Commercial paper, bills of exchange, &c.

Securities for payment of money, stocks, bonds, mortgages, ground rents, quit rents.

Precautions against counterfeiting and misappropriation of money.

BANK OF VICTORIA, Collins-street East, Melbourne.

1559 Bank Notes, issued by the Bank of Victoria.

1560 Statistics of the Bank, and its branches.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1561 Sovereigns and Half-sovereigns, coined at the Victorian Branch of the Royal Mint, Melbourne.

COMMERCIAL BANK OF AUSTRALIA, Melbourne.

1562 Specimens of Bank Notes issued by the Commercial Bank of Australia.

1563 Photographs and Statistics of the Commercial Bank.

NATIONAL BANK OF AUSTRALASIA, Melbourne.

1564 Specimens of Bank Notes issued by the National Bank of Australasia.

1565 Statistics of the National Bank.

CLASS 345.—Government and law. Various systems of government.

Departments of government. Revenue and taxation, military organisation, executive powers, legislative forms and authority, judicial functions and systems, police regulations, government charities.

International relations; international law; diplomatic and consular service, &c., allegiance and citizenship; naturalisation.

Codes.

Municipal government.

Protection of property in inventions.

Postal system and appliances.

Punishment of crime.

Prisons and prison management and discipline; police stations; houses of correction; reform schools; naval or marine discipline, punishment at sea.

PENAL DEPARTMENT, INSPECTOR-GENERAL OF, Melbourne.

- 1566 Warder's Uniform, coats, vests, and trousers.
- 1567 Lunatic Asylum, coats, vests, and trousers.
- 1568 Strait Jacket.
- 1569 Prisoner's Jacket and Trousers.
- 1570 Cabbage Tree Hats, superior.
- 1571 Cabbage Tree Hats, for prisoners' ware.
- 1572 Housewives.
- 1573 Vegetable Nets.
- 1574 Aboriginal Blankets.
- 1576 Skates, English pattern.
- 1577 Manuscript Books, demy, fcap., and post, assorted sizes.
- 1578 Scarf Pins and Bone Rings.
- 1579 Book Markers and Paper Knives.
- 1580 Coir Mats.
- 1581 Coir Matting.
- 1582 Cabbagetree Hats.
- 1583 Fancy Mats.
- 1584 Garden Seat.
- 1585 Umbrella-stand and Door-scraper.

CLASS 347.—Co-operative associations.

Political societies and organisations.

Military organisations and orders.

Trade unions and associations.

Industrial organisations.

Secret orders and fraternities.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 1587 Baskets, Mats, Trays, and Nets, made at Coranderrk Aboriginal Mission Station.

- 1588 Vocabulary of Victorian Aboriginal Dialects.
 - 1589 Aboriginal Vocabulary and Treatise.
 - 1590 Bluestone Tomahawk.
 - 1591 Photographic Portraits of Victorian Aborigines.
-

CLASS 349.—Art and industrial exhibitions.—Agricultural fairs, state and county exhibitions, national exhibitions, international exhibitions, international congresses, &c.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

- 1592 Victorian Ensign, Blue, Local Naval Forces.
 - 1593 Victorian Ensign, Red, Merchant Vessels.
 - 1594 English Red Ensign.
-

DEPARTMENT IV.—ART.

SCULPTURE.

CLASS 402.—Medals, pressed and engraved; electrotypes of medals.

COMMISSIONERS FOR VICTORIA FOR THE PHILA-
DELPHIA EXHIBITION, Melbourne.

- 1595 Medals of the Victorian Intercolonial Exhibition, 1875.
 - 1596 Seal of the Melbourne Public Library.
 - 1597 Seal of the Melbourne University.
 - 1598 Seal of the Melbourne Exhibition, 1862.
-

PAINTING.

CLASS 410.—Paintings in oil on canvas, panels, &c.

CAMPBELL, O. R., Punt-road, Windsor.

- 1599 Crossing the Plains.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

- 1600 Specimens of Heraldic Painting on Panels, including a Viscount's, an Earl's, and a Baron's Coat of Arms.

CURTIS, J. W., Bourke-street East, Melbourne.

- 1601 Track off the Point Nepean-road.

GUERARD, E. VON, Gipps-street, East Melbourne.

- 1602 Pulpit Rock, Cape Schank.

- 1603 Phillip Island.

- 1604 Ballarat in 1873.

JOHNSTONE, H. J., Bourke-street East, Melbourne.

- 1605 "Summer Sunset—Lagoon near Seymour."

WHITEHEAD, ISAAC, Collins-street East, Melbourne.

- 1606 Dandenong State Forest.

ENGRAVING AND LITHOGRAPHY.

CLASS 420.—Drawings with pen, pencil, or crayons.

BOWMAN, JOHN S., 31 Russell-street.

- 1607 The Knob in the Australian Alps, Crayon—Miss Bowman.

- 1608 In the Australian Alps, Crayon—Miss Adams.

- 1609 Fall from the Omeo Plains, Crayon.

- 1610 Valley in North Gipps Land, Crayon.

- 1611 A Pool in the Otway Ranges, Crayon—F. Shaw.

- 1612 Bushy Park, Crayon.

CLASS 423.—Lithographs, zincographs, &c.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

- 1613 Lithographs of Fossil Fruits and Seeds.

PHOTOGRAPHY.

CLASS 430.—Photographs on paper, metal, glass, wood, fabrics or
enamel surfaces.

ARARAT, SHIRE COUNCIL OF, Ararat.

- 1614 Photographic Views and Statistics of the Shire of Ararat.

BATCHELDER & CO., Collins-street East, Melbourne.

- 1615 Photographs of Persons born in the Colony of Victoria.

BOCK, HENRY, Sale, Gippsland.

- 1616 Photographs of Victorian Native Flowers.

CHUCK, T. F., Royal Arcade, Melbourne.

- 1617 Photographs of Persons born in the Colony of Victoria.

COLAC, SHIRE COUNCIL OF, Colac.

- 1618 Photographic Views of the District of Colac.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 1619 Photographic Views of Ararat.
 1620 " " of the Shire of Bannockburn.
 1621 " " " Barrabool.
 1622 " " " Bellarine (statistics only).
 1623 " " Borough of Brighton.
 1624 " " City of Ballarat.
 1625 " " Band of Hope and Albion Consols
 Company's Claims.
 1626 " " Borough of Creswick.
 1627 " " Shire of Corio (statistics only).
 1628 " " " Darebin.
 1629 " " Borough of Daylesford.
 1630 " " " Eaglehawk.
 1631 " " " Echuca.
 1632 " " " Hawthorn.
 1633 " " Shire of Huntly.
 1634 " " " Heidelberg.
 1635 " " " Korong.
 1636 " " " Marong.
 1637 " " " Mount Franklin.
 1638 " " Mine and Machinery, Winter's Free-
 hold Gold Mining Company.
 1639 " " Shire of Oxley.
 1640 " " Town of Richmond.
 1641 " " Borough of St. Kilda.
 1642 " " " Sandridge.
 1643 " " " Stawell.
 1644 " " " Sale.
 1645 " " Shire of Strathfieldsaye.
 1646 " " Borough of Tarnagulla.
 1647 " " Shire of Winchelsea.
 1648 " " Melbourne, by John Noone.
 1649 " " of Public Buildings, Warehouses, and Private
 1650 Residences in the City of Melbourne.
 1651 View—Mint.
 1652 " Law Courts.
 1653 " Town Hall.
 1654 " Treasury.
 1655 " Custom House.

- 1656 View—M'Ewan, James, and Co.'s Warehouse, Elizabeth-street.
 1657 „ Menzie's Hotel, Collins and William streets.
 1658 „ Goldsbrough and Co.'s Warehouse, Collins-street.
 1659 „ Solcberg and Son's Warehouse, Little Flinders-street.
 1660 „ Banks Brothers, Bell, and Co.'s Warehouse, Little Flinders-street.
 1661 „ Paterson, Ray, Palmer, and Co.'s Warehouse, Little Flinders-street.
 1662 „ Briscoe and Co.'s Warehouse, Collins-street East.
 1663 „ Sands and M'Dougall's Warehouse, Collins-street West.
 1664 „ National Bank of Australia.
 1665 „ Bank of New South Wales.
 1666 „ Oriental Bank.
 1667 „ Carlton Brewery.
 1668 „ Sargood and Sons' Warehouse, Flinders-street.
 1669 „ Clough and Co.'s Wool Warehouse.
 1670 „ M'Arthur, Sherrard, and Copeland's Warehouse.
 1671 „ Scotch Church, Collins-street.
 1672 „ Victoria Sugar Company's Works, Yarraville.
 1673 „ M'Naughton, Love and Co.'s Warehouse.
 1674 „ Connell, Hogarth, and Co.'s Warehouse.
 1675 „ Bank of Victoria.
 1676 „ Railway Pier, Sandridge.
 1677 „ Dr. Beaney's Residence.
 1678 Photographs of Sheep bred by Messrs. Dorbin.
 1679 „ „ Cattle (5).

CRESWICK, BOROUGH COUNCIL OF, Creswick.

- 1680 Photographic Views and Statistics of the Borough of Creswick.

DAREBIN, SHIRE COUNCIL OF, East Bourke.

- 1681 Photographic Views and Statistics of the Shire of Darebin.

ECHUCA, BOROUGH COUNCIL OF, Echuca.

- 1682 Photographic Views and Statistics of Echuca.

EMERALD HILL, BOROUGH COUNCIL OF, Emerald Hill.

- 1683 Photographic Views of Emerald Hill.

HOTHAM, TOWN COUNCIL OF, Hotham.

- 1684 Photographic Views and Statistics of the Town of Hotham.

JOHNSTONE, O'SHANNESY & CO., Bourke-street, Melbourne.

- 1686 Photographs coloured in Oils.

M'DONALD, D., High-street, St. Kilda.

- 1687 Photographic Views.

NOBLE, TIMOTHY, Bourke-street East, Melbourne.

1688 Photographs of Theatrical Celebrities.

1689 Chevalier Blondin, hero of Niagara.

PHŒNIX FOUNDRY CO. (Limited), Ballarat.

1690 Photograph of Locomotives, Engine, and Tender, manufactured for the Victorian Government by the exhibitors.

PRAHRAN, TOWN COUNCIL OF, Prahran.

1691 Photographic Views and Statistics of the Town of Prahran.

ROBERTSON BROTHERS, Colac.

1692 Coloured Photographs of Cattle bred by Exhibitors.

SANDHURST, CITY OF, Sandhurst.

1693 Photographic Views and Statistics of the City of Sandhurst.

STEWART & CO., Bourke-street East, Melbourne.

1694 Photographs of Persons born in the Colony of Victoria.

SURVEYOR-GENERAL OF VICTORIA, Melbourne.

1695 Photographic Views of Botanical Gardens.

1696 " " Fitzroy Gardens.

1697 " " Carlton Gardens.

1698 " " Flagstaff Gardens.

1699 " " Melbourne (14).

WANGARATTA, SHIRE COUNCIL OF, Wangaratta.

1700 Photographic Views and Statistics of the Shire of Wangaratta.

WILLETT, G., Bridge-street, Ballarat.

1701 Coloured Photographs.

WILSON, SIR SAMUEL, Ercildoun.

1702 Photograph—Team of Hereford Bullocks, bred by Exhibitor.

1703 " Residence of Exhibitor.

1704 " Residence of Exhibitor.

1705 " Prize Sheep, bred by Exhibitor.

CLASS 432.—Photo-lithographs, &c.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

1706 Biographical Charts of the Schools of Venice, the Venetian States, Genoa, Cremona, Mantua, Milan, Ferrara, Modena, and Palermo. Tools. Imperial folio, morocco, extra gilt.

INDUSTRIAL AND ARCHITECTURAL DESIGNS, MODELS, AND DECORATIONS.

CLASS 442.—Decorations of interior of buildings.

DOWLING, WILLIAM, Emerald Hill.

- 1707 Centre Flowers.
- 1708 Trusses.

HEATHCOTE, T. S., Carlton.

- 1709 Painted Panels, imitation Siena marble.
- 1710 Painted Panels, imitation Italian pink marble.

MURPHY, EDWARD, Sandridge-road, Melbourne.

- 1711 Centre Flowers and Ventilators.
- 1712 Registered Ornamental Chimney Cap.

PATERSON BROTHERS, Carlton.

- 1713 Tablets of Imitation Wood.
- 1714 Tablet of Imitation Marble.

PEPPER, GEORGE, Windsor.

- 1715 Plasterer's Models.
- 1716 Ceiling and Wall Patent Ventilators.

DEPARTMENT V.—MACHINERY.

MACHINES, TOOLS, AND APPARATUS OF MINING, METAL- LURGY, CHEMISTRY, AND THE EXTRACTIVE ARTS.

CLASS 501.—Well and shaft boring.

MORRISON, L. K., Melbourne.

- 1717 Patent Abyssinian Tube Wells and Pumps, with Boring Apparatus.

CLASS 503.—Hoisting machinery and accessories.

WHITE, DAVID, Stawell.

- 1718 Patent Model Safety Hook, to prevent accidents from over-winding in mining claims.
- 1719 Full-sized Working Hook.

CLASS 504.—Pumping, draining, and ventilating.

O'MALLEY, EDMUND, 100 Elizabeth-street, Melbourne.

- 1720 Ventilating Safety Cage, for mines. This cage acts as a ventilator to the mine, and should the rope break the cage will stick in the shaft; there is also a bolt attached to the rope which liberates the cage on striking poppet heads.
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CLASS 505.—Crushing, grinding, sorting, and dressing. Breakers, stamps, mills, pans, screens, sieves, jigs, concentrators.

HARKNESS, A., & CO., Victoria Foundry, Shamrock-street, Sandhurst.

- 1721 Cliff's Patent Disc, fitted on screwed stamper shank.
 1722 Inside Shell, showing principle of disc.
 1723 Cook's Patent Cam or Wiper, for lifting revolving stamps.

PERRY, DAVIS & CO., Sandhurst.

- 1724 Stamper Gratings.
-

RAILWAY PLANT, ROLLING STOCK, AND APPARATUS.

CLASS 571.—Carriages, waggons, trucks, &c.

CORNISH & CO., 2 Elizabeth-street, Melbourne.

- 1725 Seats for Railway Carriages.
-

CLASS 573.—Wheels, tires, axles, bearings, &c.

STONEMAN, EDWARD, Stephenson-street, Richmond.

- 1726 Railway Truck Spring.
-

WATER TRANSPORTATION AND APPLIANCES.

CLASS 590.—Boats and sailing vessels. Sailing vessels used in commerce. Sailing vessels used in war. Yachts and pleasure boats. Rowing boats of all kinds. Life boats and salvage apparatus, with life rafts, belts, &c. Submarine armour, diving bells, &c. Ice boats.

CORNISH & CO., 2 Elizabeth-street, Melbourne.

- 1727 Life-preserving Mattresses.
 1728 Life Buoys.
 1729 Combined Life Belts and Pillows.
 1730 Model of Life-saving Raft.
 1731 Seats and Couches for general use in ships.
 1732 Ordinary Mattresses.

DEPARTMENT VI.—AGRICULTURE.

ARBORICULTURE AND FOREST PRODUCTS.

CLASS 600.—Timber and trunks of trees, entire or in transverse or truncated sections, with specimens of barks, leaves, flowers, seed vessels, and seed.

Masts, spars, knees, longitudinal sections of trees, railway ties, ship timber, lumber roughly sawn; as planks, shingles, lath, and staves.

Timber and lumber prepared in various ways to resist decay and combustion; as by injection of salts of copper and zinc.

BASS RIVER STEAM SAW MILLS, Bass River.

1733 Blue Gum Timber.

BOTANIC GARDENS, DIRECTOR OF, MELBOURNE.

Carpological Collection.

		Order.	Habitat.
1734	<i>Abrus precatorius</i> (Linnæus)	Leguminosæ—The Beaded Liana	Queensland & N. Aust.
1735	<i>Acacia armata</i> (Robt. Brown)	Leguminosæ—The Prickly Acacia	Victoria
1736	<i>Acacia calamifolia</i> (Sweet) ...	Leguminosæ—The Red-leaved Acacia	Victoria
1737	<i>Acacia rigens</i> (A. Cunningham)	} Leguminosæ	Victoria
1738	<i>A. chordophylla</i> (F. von Mueller)		
1739	<i>Acacia cultriformis</i> (A. Cunningham)	Leguminosæ	N. S. Wales
1740	<i>Acacia dentifera</i> (Bentham) ...	Leguminosæ	W. Aust.
1741	<i>Acacia brachybotrya</i> (Bentham) —variety <i>glaucophylla</i>	Leguminosæ	Victoria
1742	<i>Acacia extensa</i> (Lindley) ...	Leguminosæ	W. Aust.
1743	<i>Acacia homalophylla</i> (A. Cunningham)	Leguminosæ—The Myall	Victoria
1744	<i>Acacia implexa</i> (Bentham) ...	Leguminosæ—The Twisted Acacia	Victoria
1745	<i>Acacia juniperina</i> (Willdenow)	Leguminosæ—The Juniper-leaved Acacia	Victoria
1746	<i>Acacia lophantha</i> (Willdenow)	Leguminosæ—The Crested Wattle	W. Aust.
1747	<i>Acacia longifolia</i> (Willdenow)	Leguminosæ—The Long-lvd. Acacia	Victoria
1748	<i>Acacia lunata</i> (Sieber) ...	Leguminosæ	Victoria
1749	<i>Acacia melanoxylon</i> (R. Brown)	Leguminosæ—The Blackwood	Victoria

		Order.	Habitat.
1750	<i>Acacia myrtifolia</i> (Willdenow)	Leguminosæ—The Myrtle lvd. <i>Acacia</i>	Victoria
1751	<i>Acacia pulchella</i> (Robt. Brown)	Leguminosæ	W. Aust.
1752	<i>Acacia retinodes</i> (Schlechtendahl)	Leguminosæ	Victoria
1753	<i>Acacia Riceana</i> (Henslow) ...	Leguminosæ	Tasmania
1754	<i>Acacia salicina</i> (Lindley) ...	Leguminosæ—The Willow-leaved <i>Acacia</i>	Tasmania
1755	<i>Acacia saligna</i> (Wendland) ...	Leguminosæ—The Weeping <i>Acacia</i>	W. Aust.
1756	<i>Acacia sphacelata</i> (Bentham) ...	Leguminosæ	W. Aust.
1757	<i>Acacia spinescens</i> (Bentham) ...	Leguminosæ	Victoria
1758	<i>Acacia suaveolens</i> (Willdenow)	Leguminosæ—The Sweet-scented <i>Acacia</i>	Victoria
1759	<i>Acacia vestita</i> (Ker) ...	Leguminosæ	N. S. Wales
1760	<i>Acacia</i> sp. ...	Leguminosæ	Queensland
1761	<i>Agonis flexuosa</i> (Schauer) ...	Myrtaceæ — The Willow Myrtle	W. Aust.
1762	<i>Agonis juniperina</i> (Schauer) ...	Myrtaceæ — Juniper-leaved <i>Agonis</i>	W. Aust.
1763	<i>Agonis marginata</i> (Schauer) ...	Myrtaceæ	W. Aust.
1764	<i>Angophora intermedia</i> (De Candolle)	Myrtaceæ — The Spurious Apple-tree	Victoria
1765	<i>Angophora subvelutina</i> (F. von Mueller)	Myrtaceæ	Queensland & N. S. W.
1766	<i>Araucaria Bidwilli</i> (Hooker) ...	Coniferæ — The Bunya Bunya Pine	Queensland
1767	<i>Araucaria excelsa</i> (Robt. Brown)	Coniferæ — The Norfolk I. Pine	Norfolk Isld.
1768	<i>Arthropodium strictum</i> (Robt. Brown)	Liliaceæ	Victoria
1769	<i>Atriplex nummularium</i> (Lindley)	Chenopodeæ	Victoria
1770	<i>Baloghia lucida</i> (Endlicher) ...	Euphorbiaceæ—The Bloodwood	Queensld. & N. S. Wales
1771	<i>Banksia integrifolia</i> (Linnaeus, fl.)	Proteaceæ — The Coast Honeysuckle	Victoria
1772	<i>Banksia Preissii</i> ...	Proteaceæ	W. Aust.
1773	<i>Banksia serrata</i> (Linnaeus, fl.)	Proteaceæ	Victoria
1774	<i>Banksia</i> sp. ...	Proteaceæ	W. Aust.
1775	<i>Boronia denticulata</i> (Smith) ...	Rutaceæ	W. Aust.
1776	<i>Bursaria spinosa</i> (Cavanilles) ...	Pittosporæ—The Prickly Box	Victoria
1777	<i>Bossiaea heterophylla</i> (Ventenat)	Leguminosæ	Victoria
1778	<i>Bossiaea microphylla</i> (Smith) ...	Leguminosæ	Victoria

		Order.	Habitat.
1779	<i>Bossiaea rhombifolia</i> (Sieber) ...	Leguminosæ	N. S. Wales & Queensld.
1780	<i>Bossiaea scolopendria</i> (Smith) ...	Leguminosæ	N. S. Wales
1781	<i>Brachysema lanceolata</i> (Meissner)	Leguminosæ	W. Aust.
1782	<i>Burchardia umbellata</i> (Robt. Brown)	Melanthaceæ	Victoria
1783	<i>Calectasia intermedia</i> ...	Juncaceæ	—
1784	<i>Callicoma serratifolia</i> (Andrews)	Saxifrageæ	Queensld. & N. S. Wales
1785	<i>Callistemon brachyandrus</i> (Lindley)	Myrtaceæ	Victoria
1786	<i>Callistemon coccineus</i> (F. von Mueller)	Myrtaceæ — The Scarlet Bottle- brush	S. Australia
1787	<i>Callistemon speciosus</i> (De Candolle)	Myrtaceæ	W. Aust.
1788	<i>C. glaucus</i> (F. von Mueller) ...		
1789	<i>Callistemon lanceolatus</i> (De Candolle)	Myrtaceæ	Victoria
1790	<i>Callistemon linearis</i> (De Candolle)	Myrtaceæ	N. S. Wales
1791	<i>Callistemon Phœniceus</i> (Lindley)	Myrtaceæ	W. Aust.
1792	<i>Callistemon rigidus</i> (Robt. Brown)	Myrtaceæ	N. S. Wales
1793	<i>Callistemon salignus</i> (De Candolle)	Myrtaceæ	Victoria
1794	<i>Callistemon</i> sp. ...	Myrtaceæ	—
1795	<i>Callitris actinostrobus</i> (F. von Mueller)	Coniferæ	W. Aust.
1796	<i>Calothamnus purpureus</i> (Endlicher)	Myrtaceæ	W. Aust.
1797	<i>Calothamnus quadrifidus</i> (Robt. Brown)	Myrtaceæ	W. Aust.
1798	<i>Calothamnus sanguineus</i> (Labi-lardière)	Myrtaceæ	W. Aust.
1799	<i>Carumbium populifolium</i> (Reinward)	Euphorbiaceæ	Victoria
1800	<i>Carmichaelia Australis</i> (Robert Brown)	Leguminosæ	New Zealand
1801	<i>Casuarina glauca</i> (Sieber)	Casuarineæ—The Desert Sheoak	Victoria
1802	<i>Casuarina quadrivalvis</i> (Labi-lardière)	Casuarineæ — The Coast or Droop- ing Sheoak	Victoria
1803	<i>Casuarina suberosa</i> (Otto Dietrich)	Casuarineæ — The Erect or Cork Bark Sheoak	Victoria
1804	<i>Casuarina distyla</i> (Ventenat)	Casuarineæ — The Stunted Sheoak	Victoria

			Order.	Habitat.
1805	<i>Castanospermum</i> Australe (A. Cunningham)		Leguminosæ—The Moreton Bay Chestnut	Queensland
1806	<i>Cassytha</i> melantha (Robert Brown)		Laurineæ	Victoria
1807	<i>Cedrela</i> Toona (Roxburgh) ...		Seliaceæ — The Red Cedar	N.S.W. and Queensland
1808	<i>Chorizema</i> ilicifolium (Labillardière)		Leguminosæ	W. Aust.
1809	<i>Citriobatus</i> multiflorus (A. Cunningham)		Pittosporeæ	Queensland & N.S.W.
1810	<i>Coprosma</i> lucida (Forster) ...		Rubiaceæ — Karangu	N. Zealand
1811	<i>Comesperma</i> volubile (Labillardière)		Polygaleæ — Blue Climber	Victoria
1812	<i>Corræa</i> alba (Andrews) ...		Rutaceæ	Victoria
1813	<i>Corræa</i> speciosa (Aiton) ...		Rutaceæ — The Native Fuchsia	Victoria
1814	<i>Corynocarpus</i> lævigatus (Forster)		Myrsinaceæ—The Native Laurel, or Karaka	N. Zealand
1815	<i>Corypha</i> Australis (Robert Brown)		Palmeæ—The Fan Palm	East Aust.
1816	<i>Cordyline</i> Forsteri (F. von Mueller)		Liliaceæ — The Broad-leaved Palm Lily	N. Zealand
1817	<i>Cordyline</i> indivisa (Kunth) ...		Liliaceæ—The Tall Palm Lily	N. Zealand
1818	<i>Cupania</i> artyana ...		Sapindaceæ	—
1819	<i>Cyathodes</i> adscendens (Hooker, fil.)		Epacrideæ	Tasmania
1820	<i>Cycas</i> media (Robert Brown) ...		Cycadeæ	N. Aust. & Queensland
1821	<i>Cycas</i> gracilis (Miguel) ...		Cycadeæ	Queensland
1822	<i>Daviesia</i> corymbosa (Smith) ...		Leguminosæ—The Native Hop	Victoria
1823	<i>Daviesia</i> ulicina (Smith) ...		Leguminosæ—The Furze-lvd. Nat. Hop	Victoria
1824	<i>Dillwynia</i> ericifolia, variety glaberrima (Smith)		Leguminosæ	Victoria
1825	<i>Dillwynia</i> hispida (Lindley) ...		Leguminosæ	Victoria
1826	<i>Dodonæa</i> triquetra (Andrews)		Sapindaceæ	Victoria
1827	<i>Dodonæa</i> viscosa (Linnæus) ...		Sapindaceæ—The Native Lig. vitæ	Victoria
1828	<i>Doryanthes</i> excelsa (Correa de Serra)		Amaryllideæ—The N. S. Wales Spear Lily	N. S. Wales
1829	<i>Doryanthes</i> Palmieri (W. Hill)		Amaryllideæ—The Queensland Spear Lily	Queensland

		Order.	Habitat.
1830	<i>Dryandra floribunda</i> (R. Brown)	Proteaceæ	W. Australia
1831	<i>Elæocarpus dentatus</i> (Vahl) ...	Tiliaceæ—Hinau	N. Zealand
1832	<i>Elæocarpus cyaneus</i> (Aiton) ...	Tiliaceæ	Victoria
1833	<i>Entelæa arborescens</i> (R. Brown)	Tiliaceæ—Hauama	N. Zealand
1834	<i>Eremophila bignoniæflora</i> (F. von Mueller)	Myoporineæ	Victoria
1835	<i>Eremophila longifolia</i> (F. von Mueller)	Myoporineæ	Victoria
1836	<i>Eremophila maculata</i> (F. von Mueller)	Myoporineæ	Victoria
1837	<i>Eriostemon myoporoides</i> (De Candolle)	Rutaceæ	Victoria
1838	<i>Eucalyptus calophylla</i> (Robt. Brown)	Myrtaceæ	W. Aust.
1839	<i>Eucalyptus colossea</i> (F. von Mueller)	Myrtaceæ — The Karri Gum	W. Aust.
1840	<i>Eucalyptus coriacea</i> (A. Cunningham)	Myrtaceæ — The Mountain White Gum	Victoria
1841	<i>Eucalyptus cornuta</i> (Labillardière)	Myrtaceæ — The Yeit Tree	W. Aust.
1842	<i>Eucalyptus cornuta</i> (Labillardière), variety <i>symphyocarpa</i>	Myrtaceæ	W. Aust.
1843	<i>Eucalyptus corymbosa</i> (Smith)	Myrtaceæ — The Bloodwood Gum	N. S. Wales & Queensld.
1844	<i>Eucalyptus corynocalyx</i> (F. von Mueller)	Myrtaceæ	South Aust.
1845	<i>Eucalyptus ficifolia</i> (F. von Mueller)	Myrtaceæ — The Blackbut	W. Aust.
1846	<i>Eucalyptus leucoxylon</i> (F. von Mueller)	Myrtaceæ — The Ironbark	Victoria
1847	<i>Eucalyptus globulus</i> (Labillardière)	Myrtaceæ — The Common Blue Gum	Victoria
1848	<i>Eucalyptus globulus</i> , variety ...	Myrtaceæ	Victoria
1849	<i>Eucalyptus incrassata</i> (Labillardière)	Myrtaceæ — The Mallee Scrub Gum	N. S. Wales, S. & W. Aust.
1850	<i>Eucalyptus mezacarpa</i> (F. von Mueller)	Myrtaceæ	W. Aust.
1851	<i>Eucalyptus melliodora</i> (A. Cunningham)	Myrtaceæ — The Yellow Box	Victoria
1852	<i>Eucalyptus nutans</i> (F. von Mueller)	Myrtaceæ — The Nodding Gum	W. Aust.
1853	<i>Eucalyptus occidentalis</i> (Endlicher)	Myrtaceæ	W. Aust.
1854	<i>Eucalyptus pachypoda</i> (F. von Mueller)	Myrtaceæ	W. Aust.
1855	<i>Eucalyptus tetraptera</i> (Turczanow)	Myrtaceæ	W. Aust.

		Order.	Habitat.
1856	<i>Eucalyptus viminalis</i> (Labillardère)	Myrtaceæ — The Weeping Gum, Box, &c.	Victoria
1857	<i>Exocarpus cupressiformis</i> (Labillardière)	Santalaceæ — The Native Cherry	Victoria
1858	<i>Ficus rubiginosus</i> (Desfontaines)	Urticeæ	Queensland
1859	<i>Ficus macrophylla</i> (Desfontaines)	Urticeæ — The Moreton Bay Fig	Queensland & N.S.W.
1860	<i>Frenela robusta</i> (A. Cunningham), variety <i>microcarpa</i>	Coniferæ	N.S. Wales
1861	<i>Fr. columellaris</i> (F. von Mueller)		
1862	<i>Frenela robusta</i> (A. Cunningham)— <i>Callitris crassivalvis</i>	Coniferæ — The Murray Pine	Victoria
1863	<i>Frenela rhomboidea</i> (Endlicher)	Coniferæ — The Native Cypress	Victoria
1864	<i>Frenela rhomboidea</i> (Endlicher) variety <i>Tasmanica</i>	Coniferæ — The Oyster Bay Pine	Tasmania
1865	<i>Frenela Australis</i> (Robt. Brown)	Coniferæ — The Tasmn. Cypress	Tasmania
1866	<i>Fr. Gunnii</i> (Endlicher)		
1867	<i>Frenela robusta</i> (A. Cunningham), variety <i>verrucosa</i>	Coniferæ — The Desert Pine	Victoria
1868	<i>Callitris verrucosa</i> (Robt. Brown)		
1869	<i>Gastrolobium bilobum</i> (Robert Brown)	Leguminosæ — The Poison Plant	W. Aust.
1870	<i>Goodenia ovata</i> (Smith)	Goodeniaceæ	Victoria
1871	<i>Goodia medicaginea</i> (F. von Mueller)	Leguminosæ	Victoria
1872	<i>Grevillea Banksii</i> (R. Brown)	Proteaceæ	Queensland
1873	<i>Grevillea pectinata</i> (R. Brown)	Proteaceæ	W. Aust.
1874	<i>Grevillea oleoides</i> (Lieber) variety <i>dimorpha</i> (F. Mueller)	Proteaceæ	Victoria
1875	<i>Grevillea Hilliana</i> (F. Mueller)	Proteaceæ	Queensland
1876	<i>Grevillea ilicifolia</i> (R. Brown)	Proteaceæ	Victoria
1877	<i>Grevillea laurifolia</i> (Sieber)	Proteaceæ	N.S. Wales
1878	<i>Grevillea linearis</i> (R. Brown)	Proteaceæ	N.S. Wales
1879	<i>Grevillea macrostylis</i> (F. von Mueller)	Proteaceæ	W. Aust.
1880	<i>Grevillea robusta</i> (A. Cunningham)	Proteaceæ—The Silky Oak	N.S. Wales & Queensl.
1881	<i>Guichenotia ledifolia</i> (J. Garz)	Sterculiaceæ	W. Aust.
1882	<i>Hakea acicularis</i> (R. Brown)	Proteaceæ	N.S. Wales
1883	<i>Hakea ulicina</i> , variety <i>carinata</i> (F. von Mueller)	Proteaceæ	S. Australia
1884	<i>Hakea corymbosa</i> (R. Brown)	Proteaceæ	W. Aust.
1885	<i>Hakea cucullata</i> (R. Brown)	Proteaceæ	W. Aust.
1886	<i>Hakea cycloptera</i> (R. Brown)	Proteaceæ	S. Australia
1887	<i>Hakea elliptica</i> (R. Brown)	Proteaceæ	W. Aust.
1888	<i>Hakea flexilis</i> (F. von Mueller)	Proteaceæ	Victoria
1889	<i>Hakea gibbosa</i> (Cavanilles)	Proteaceæ	N. S. Wales

		Order.	Habitat.
1890	<i>Hakea laurina</i> (Robt. Brown)...	Proteaceæ	W. Aust.
1891	<i>Hakea leucoptara</i> (Robt. Brown)	Proteaceæ	Victoria
1892	<i>Hakea microcarpa</i> (Robt. Brown)	Proteaceæ	Victoria
1893	<i>Hakea nodosa</i> (Robt. Brown)...	Proteaceæ	Victoria
1894	<i>Hakea oleifolia</i> (Robt. Brown)..	Proteaceæ	W. Aust.
1895	<i>Hakea pugioniformis</i> (Cavanilles)	Proteaceæ	Victoria
1896	<i>Hakea purpurea</i> (Hooker) ...	Proteaceæ	Victoria
1897	<i>Hakea saligna</i> (Knight) ...	Proteaceæ	Queensland & N.S. Wales
1898	<i>Hakea suaveolens</i> (Robt. Brown)	Proteaceæ	W. Aust.
1899	<i>Hakea strumosa</i> (Meissner) ...	Proteaceæ	W. Aust.
1900	<i>Hakea verrucosa</i> (F. von Mueller)	Proteaceæ	W. Aust.
1901	<i>Hakea vittata</i> (Robt. Brown) ...	Proteaceæ	South Aust.
1902	<i>Hibiscus splendens</i> (Fraser) ...	Malvaceæ — The Hollyhock tree	Queensland & N.S. Wales
1903	<i>Hymenanthera dentata</i> (Robt. Brown)	Violareæ	Victoria
1904	<i>Hymenosporum flavum</i> (F. von Mueller)	Pittosporæ	Queensland & N.S. Wales
1905	<i>Ipomœa</i> sp.	Convolvulaceæ	N. S. Wales
1906	<i>Kennedya Comptoniana</i> (Link)	Leguminosæ	W. Aust.
1907	<i>Kennedya lateritia</i> (F. von Mueller)	Leguminosæ	W. Aust.
1908	<i>Kennedya monophylla</i> (Ventenat)	Leguminosæ — The Native Sarsaparilla	Victoria
1909	<i>Kennedya rubicunda</i> (Ventenat)	Leguminosæ	Victoria
1910	<i>Kentia sapida</i> — <i>Areca sapida</i> (Solander)	Palmeæ — The Nikau Palm	N. Zealand
1911	<i>Kochia aphylla</i> (R. Brown)	Coenopodeæ	Victoria
1912	<i>Kunzea corifolia</i> (Reichenbach)	Myrtaceæ	Victoria
1913	<i>Kunzea leptospermoides</i> (F. von Mueller)	Myrtaceæ	Victoria
1914	<i>Lagunaria Patersonii</i> (G. Don)	Malvaceæ — The Cow-itch Tree	Queensland
1915	<i>Lasiopetalum Baueri</i> (Steetz)	Sterculiaceæ	Victoria
1916	<i>Lasiopetalum parviflorum</i> (Rudge)	Sterculiaceæ	Victoria
1917	<i>Lasiopetalum Schulzenii</i> (Ben- tham)	Sterculiaceæ	Victoria
1918	<i>Leptospermum juniperinum</i> (Smith)	Myrtaceæ	Victoria
1919	<i>Leptospermum lævigatum</i> (F. von Mueller)	Myrtaceæ — The Coast Tea-tree	Victoria
1920	<i>Leptospermum lanigerum</i> (Smith)	Myrtaceæ — The Woolly Tea-tree	Victoria
1921	<i>Leptospermum myrsinoides</i> (Schlechtendahl)	Myrtaceæ	Victoria

		Order.	Habitat.
1922	<i>Lhotzkya genetylloides</i> (F. von Mueller)	Myrtaceæ	Victoria
1923	<i>Lomatia longifolia</i> (Robt. Brown)	Proteaceæ	Victoria
1924	<i>Macrozamia</i> sp.	Cycadeæ	Queensland
1925	<i>Macrozamia Perowskiana</i> (Miguel)	Cycadeæ	Queensland
1926	<i>M. Denisonii</i> (F. von Mueller)		
1927	<i>Marianthus biguoniaceus</i> (F. von Mueller)	Pittosporeæ	Victoria
1928	<i>Melaleuca armillaris</i> (Smith) ...	Myrtaceæ—Tea Tree	Victoria
1929	<i>Melaleuca decussata</i> (R. Brown)	Myrtaceæ — Close-leaved Tea Tree	Victoria
1930	<i>Melaleuca densa</i> (Robt. Brown)	Myrtaceæ	W. Aust.
1931	<i>Melaleuca elliptica</i> (Labillardière)	Myrtaceæ	W. Aust.
1932	<i>Melaleuca ericifolia</i> (Smith) ...	Myrtaceæ — The Common Tea Tree	Victoria
1933	<i>Melaleuca genistifolia</i> (Smith)...	Myrtaceæ	N. S. Wales, N. Aust., & Queensland
1934	<i>Melaleuca hypericifolia</i> (Smith)	Myrtaceæ	N. S. Wales
1935	<i>Melaleuca incana</i> (Robt. Brown)	Myrtaceæ	W. Aust.
1936	<i>Melaleuca lateritia</i> (Otto) ...	Myrtaceæ	W. Aust.
1937	<i>Melaleuca linariifolia</i> (Smith)...	Myrtaceæ	Queensland & N. S. Wales
1938	<i>Melaleuca micromera</i> (Schauer)	Myrtaceæ	W. Aust.
1939	<i>Melaleuca Preissiana</i> (Schauer)	Myrtaceæ	Victoria
1940	<i>Melaleuca pustulata</i> (Hooker fil.)	Myrtaceæ	Victoria
1941	<i>Melaleuca styphelioides</i> (Smith)	Myrtaceæ	N. S. Wales
1942	<i>Melaleuca tamariscina</i> (Hooker)	Myrtaceæ	Queensland
1943	<i>Melaleuca uncinata</i> (Robert Brown)	Myrtaceæ	Victoria
1944	<i>Melaleuca Wilsonii</i> (F. von Mueller)	Myrtaceæ	Victoria
1945	<i>Melicope ternata</i> (Forster) ...	Rutaceæ—Tataka	N. Zealand
1946	<i>Myoporum dulce</i> (Bentham) ...	Myoporineæ	Victoria
1947	<i>Myrsine d'Urvillei</i> (De Candolle)	Myrsineæ	N. Zealand
1948	<i>Myrsine variabilis</i> (Robert Brown)	Myrsineæ — The Smooth Beech	Victoria
1948A	<i>Marsilea macropus</i>	Marsileaceæ—The Nardoo	N. Aust.
1949	<i>Marsilea</i> sp.	The Native Ginger	Queensland
1950	<i>Nephelium leiocarpum</i> (F. von Mueller)	Sapindaceæ	Queensland & N. S. Wales
1951	<i>Nesodaphne Tawa</i> (Hooker, fil.)	Laurineæ — The Tawa	N. Zealand
1952	<i>Oxylobium callistachys</i> (Bentham)	Leguminosæ	W. Aust.

		Order.	Habitat.
1953	<i>Oxylobium lineare</i> (Bentham)	Leguminosæ	W. Aust.
1954	<i>Pandanus Australis</i>	Pandaneæ	
1955	<i>Pandanus pedunculatus</i>	Pandaneæ	Queensland
1956	<i>Personia rigida</i> (Robt. Brown)	Proteaceæ	Victoria
1957	<i>Phormium tenax</i> (Forster) ...	Liliaceæ—The Flax Lily, or N. Z. Flax	N. Zealand
1958	<i>Pittosporum Colensoi</i> (Hooker, fil.)	Pittosporeæ	N. Zealand
1959	<i>Pittosporum crassifolium</i> (Banks and Solander)	Pittosporeæ—Tarata	N. Zealand
1960	<i>Pittosporum eugenoides</i> (A. Cun- ningham)	Pittosporeæ—Tarata	N. Zealand
1961	<i>Pittosporum phillyræoides</i> (De Candolle)	Pittosporeæ	Victoria
1962	<i>Pittosporum revolutum</i> (Aiton)	Pittosporeæ	Victoria
1963	<i>Pittosporum rhombifolium</i> (A. Cun- ningham)	Pittosporeæ	Queensland & N.S.W.
1964	<i>Pittosporum tenuifolium</i> (Banks and Solander)	Pittosporeæ—Taw- hiwhe	N. Zealand
1965	<i>Pittosporum undulatum</i> (Ven- tenat)	Pittosporeæ—The Native Laurel	Victoria
1966	<i>Pomaderris elliptica</i> (Labillar- dière)	Rhamneæ	Victoria
1967	<i>Pomaderris lanigera</i> (Sims) ...	Rhamneæ	N. S. Wales
1968	<i>Pomaderris ligustrina</i> (Sieber)	Rhamneæ	N. S. Wales
1969	<i>Pomaderris phillyræoides</i> (Sie- ber)	Rhamneæ	N. S. Wales
1970	<i>Pomaderris racemosa</i> (Hooker)	Rhamneæ	Victoria
1971	<i>Pomaderris vacciniifolia</i> (Reis- seck)	Rhamneæ	Victoria
1972	<i>Prostanthera nivea</i> (A. Cun- ningham)	Labiatae — White Mint Tree	Victoria
1973	<i>Prostanthera rotundifolia</i> (Robt. Brown)	Labiatae — Mint Shrub	Victoria
1974	<i>Ptychosperma Alexandræ</i> (F. von Mueller)	Palmeæ — The Alexandra Palm	Queensland
1975	<i>Ptychosperma</i> sp.	Palmeæ	Queensland
1976	<i>Pultenæa Benthami</i> (F. von Mueller)	Leguminosæ	Victoria
1977	<i>Pultenæa adaphnoides</i> (Wend- land)	Leguminosæ	Victoria
1978	<i>Pultenæa mollis</i> (Lindley) ...	Leguminosæ	Victoria
1979	<i>Pultenæa rosea</i> (F. von Mueller)	Leguminosæ	Victoria
1980	<i>Pultenæa scabra</i> (Robt. Brown)	Leguminosæ	Victoria
1981	<i>Pultenæa subumbellata</i> (Hooker)	Leguminosæ	Victoria
1982	<i>Rulingia corylifolia</i> (Graham)...	Sterculiaceæ	W. Aust.
1983	<i>Rulingia pannosa</i> (Robt. Brown)	Sterculiaceæ	Victoria
1984	<i>Rulingia parviflora</i> (Endlicher)	Sterculiaceæ	W. Aust.
1985	<i>Santalum acuminatum</i> (A. De Candolle)	Santalaceæ — Na- tive Quandong	Victoria

		Order.	Habitat.
1986	<i>Santalum cygnorum</i> (Miguel)...	Santalaceæ — The Western Austrln. Sandalwood	W. Aust.
1987	<i>Seaforthia elegans</i> (Blume) ...	Palmeæ	Trop. Aust.
1988	<i>Sentis rhynchocarpa</i> (F. von Mueller)	Myoporineæ	S. Aust. & N. S. Wales
1989	<i>Sida retusa</i> (Linnæus) ...	Malvaceæ — The Queensland Hemp	Queensland & N. Aust.
1990	<i>Solanum hystrix</i> (Robt. Brown)	Solaneæ	South Aust.
1991	<i>Solanum laciniatum</i> (R. Brown)	Solaneæ—The Kangaroo Apple	Victoria
1992	<i>Sophora tetraptera</i> (Aiton)	Leguminosæ	New Zealand
1993	<i>Edwardsia grandiflora</i> (Salisbury)		
1994	<i>Spondias pleiogyne</i> (F. von Mueller)	Anacardiaceæ—The Native Hog Plum	Queensland
1995	<i>Sprengelia incarnata</i> (Smith) ...	Epacrideæ	Victoria
1996	<i>Spyridium glomeratum</i> ...	Rhamneæ	—
1997	<i>Spyridium parvifolium</i> (F. von Mueller)	Rhamneæ	Victoria
1998	<i>Sterculia acerifolia</i> (A. Cunningham)	Sterculiaceæ — The Flame Tree	N. S. Wales
1999	<i>Sterculia diversifolia</i> (G. Don)	Sterculiaceæ—The Native Bottle Tree	Victoria
2000	<i>Styphelia ericoides</i> (Smith) ...	Epacrideæ	Victoria
2001	<i>Styphelia humifusa</i> (Persoon)...	Epacrideæ—Native Cranberry	Victoria
2002	<i>Styphelia juniperina</i> (Sprengel)	Epacrideæ	Queensland & N. S. Wales
2003	<i>Styphelia rufa</i> (F. von Mueller)	Epacrideæ	Victoria
2004	<i>Styphelia Sonderi</i> (F. von Mueller)	Epacrideæ	Victoria
2005	<i>Styphelia thymifolia</i> ...	Epacrideæ	—
2006	<i>Stylidium soboliferum</i> (F. von Mueller)	Stylidiæ—The Native Stylewort	Victoria
2007	<i>Swainsona galegifolia</i> (Robt. Brown)	Leguminosæ	N. S. Wales, Queensland, & S. Aust.
2008	<i>Swainsona Greyana</i> (Lindley)...	Leguminosæ	Victoria
2009	<i>Swainsona procumbens</i> (F. von Mueller)	Leguminosæ	Victoria
2010	<i>Syncarpia laurifolia</i> (Tenore)...	Myrtaceæ—The Turpentine Tree	N. S. Wales & Queensld.
2011	<i>Tecoma Australis</i> (R. Brown)	Bignoniaceæ—Churchill Island Creeper	Victoria
2012	<i>Telopia truncata</i> (Robt. Brown)	Proteaceæ	Tasmania
2013	<i>Templetonia retusa</i> (R. Brown)	Leguminosæ	S. and W. Australia

		Order.	Habitat.
2014	<i>Thomasea purpurea</i> (J. Gay)	Sterculiaceæ	W. Aust.
2015	<i>Tristania conferta</i> (R. Brown)	Myrtaceæ	Queensland & N.S.W.
2016	<i>Trymalium Billardieri</i> (Fenzl)	Rhamnæ	W. Aust.
2017	<i>Thryptomene Mitchelliana</i> (F. von Mueller)	Myrtaceæ	Victoria
2018	<i>Veronica Andersonii</i> (hybrid)	Scrophularinæ	N. Zealand
2019	<i>Veronica lobelioides</i>	Scrophularinæ	
2020	<i>Veronica Hulkeana</i> (F. von Mueller)	Scrophularinæ	N. Zealand
2021	<i>Veronica Derwentia</i> (Andrews)	Scrophularinæ	Victoria
2022	<i>Veronica parviflora</i> (Vahl) ...	Scrophularinæ	N. Zealand
2023	<i>Xanthorrhœa arborea</i> (Robt. Brown)	Liliacæ — The Grass Tree	Victoria
2024	<i>Xanthorrhœa Kingii</i>	Liliacæ	
2025	<i>Zamia</i> sp.	Cycadæ	Queensland
2026	<i>Zieria Smithii</i> (Andrews) ...	Rutacæ	Victoria
2027	<i>Erythræa Australis</i> (R. Brown)	Gentianæ	Victoria
2028	<i>Macrozamia Miguelii</i> (F. von Mueller)	Cycadæ	Queensland
2029	<i>Podocarpus ferruginea</i> (Don) ...	Coniferæ—Otago Black Pine	N. Zealand
2030	<i>Podocarpus excelsa</i>	Coniferæ	N. Zealand
2031	<i>Mira salicifolia</i>		N. Zealand
2032	<i>Melicytus ramiflorus</i> (Forster)	Violacæ—Ini-ini	N. Zealand

BARK.

2033	<i>Melaleuca ericifolia</i> (Common Swamp Tea Tree).
2034	„ <i>squarrosa</i> (Victorian Yellow Wood).
2035	„ <i>genistifolia</i> (Broom-leaved Tea Tree).
2036	<i>Eucalyptus obliqua</i> (Stringybark).
2037	„ <i>fissilis</i> (Messmate).
2038	<i>Acacia pycnantha</i> (Golden Wattle).
2039	„ <i>dealbata</i> (Silver Wattle).
2040	„ <i>decurrens</i> (Common Wattle).
2041	<i>Pimelia axiflora</i> (Currijong).
2042	<i>Quercus suber</i> (Cork Oak).
2043	<i>Atherosperma moschata</i> (Victorian Sassafras Tree).

POLISHED WOOD.

2044	<i>Acacia decurrens</i> (Common Wattle).
2045	„ <i>pycnantha</i> (Golden Wattle).
2046	<i>Acacia longifolia</i> (Long-leaved Wattle).
2047	„ <i>retinodes</i>
2048	„ <i>armata</i> (Prickly Acacia).
2049	„ <i>saligna</i> (Weeping Acacia).
2050	„ <i>dealbata</i> (Silver Wattle).
2051	<i>Araucaria Cunninghamii</i> (Moreton Bay Hoop Pine).
2052	„ <i>Bidwilli</i> (Bunya Bunya Pine).

- 2053 *Bursaria spinosa* (Prickly Box).
- 2054 *Casuarina quadrivalvis* (Drooping She-oak).
- 2055 „ *Suberosa* (Cork Bark She-oak).
- 2056 *Callitris rhomboidea* (Native Cypress).
- 2057 „ var. *Tasmanica* (Oyster Bay Pine).
- 2058 *Acacia melanoxylon* (Blackwood).
- 2059 *Dammara robusta* (Queensland Kauri).
- 2060 *Duboisia myoporoides* (Cork Wood).
- 2061 *Elæocarpus cyaneus*.
- 2062 *Eucalyptus corynocalyx*.
- 2063 „ *cornuta*.
- 2064 „ *Occidentalis*.
- 2065 *Exocarpus cupressiformis* (Native Cherry).
- 2066 *Ficus macrophylla* (Moreton Bay Fig).
- 2067 *Grevillea robusta* (Silky Oak).
- 2068 *Hakea accicularis*.
- 2069 „ *flexilis*.
- 2070 „ *pugioniformis*.
- 2071 „ *ulicina* (Native Furze).
- 2072 „ *saligna*.
- 2073 „ *oleifolia*.
- 2074 „ *laurina*.
- 2075 „ *suaveolens*.
- 2076 „ *cuculeata*.
- 2077 *Hymenanthera Banksii*.
- 2078 *Leptospermum lævigatum* (Coast Tea Tree).
- 2079 *Lagunaria Patersoni* (Norfolk Island Cow-itch Tree).
- 2080 *Melaleuca armillaris* (Tea Tree).
- 2081 „ *decussata* (Tea Tree).
- 2082 „ *ericifolia* (Common Swamp Tea Tree).
- 2083 „ *squarrosa* (Victorian Yellow Wood).
- 2084 „ *uncinata* (Tea Tree).
- 2085 *Myoporum insulare* (Blueberry Tree).
- 2086 *Notolæa ligustrina* (White Plum Wood).
- 2087 *Oxylobium callistachys*.
- 2088 *Panax sambucifolius* (Elderberry Ash).
- 2089 *Pittosporum undulatum* (Native Laurel).
- 2090 „ *phillyræoides*.
- 2091 „ *bicolor* (White Wood).
- 2092 *Pomaderris apetala* (Native Hazel).
- 2093 *Tristania conferta*.
- 2094 *Bedfordia salicina* (Victorian Cotton Tree).
- 2095 *Acacia juniperina* (Prickly Wattle).
- 2096 *Banksia Australis* (Honeysuckle).
- 2097 *Hedycarya Cunninghamii* (Smooth Holly, or Native Mulberry)
- 2098 *Leptospermum lanigerum* (Woolly Tea Tree).
- 2099 *Olearia argophylla* (Native Musk).
- 2100 *Prostanthera lasianthos* (Dog Wood).
- 2101 *Alsophila Australis* (Umbrella Fern).
- 2102 *Dicksonia Antarctica* (Common Tree Fern).
- 2103 „ *squarrosa* (Slender Tree Fern).

- 2104 *Cassia aculeata*.
- 2105 *Atherosperma moschata* (Sassafras Tree).
- 2106 *Fagus Cunninghamii* (Native Beech).
- 2107 *Lomatia Fraseri* (Native Holly).
- 2108 *Coprosma hirtella* (Native Woodbine).
- 2109 *Myrsine variabilis* (Smooth Beech).
- 2110 *Sterculia acerifolia* (Flame Tree).
- 2111 ,, *diversifolia* (Victorian Bottle Tree).
- 2112 ,, *fœtida*.
- 2113 *Leucopogon Richei* (Currant Wood).
- 2114 *Banksia integrifolia* (Coast Honeysuckle).
- 2115 *Acacia longifolia*, var. *sophoræ* (Coast Acacia).
- 2116 ,, *verticillata*.
- 2117 *Helichrysum cinereum*.
- 2118 *Acacia mucronata*.
- 2119 ,, *stricta*.
- 2120 *Avicenna officinalis* (Native Mangrove).
- 2121 *Melaleuca Preissiana* (Mountain Tea Tree).
- 2122 *Casuarina distyla* (Stunted Oak).
- 2123 *Dodonœa viscosa*, var. *conferta*, Phillip Island.
- 2124 *Syncarpia laurifolia* (Turpentine Tree, N.S.W.)
- 2125 *Leptospermum scoparium*.
- 2126 Roots of *Kennedya monophylla* (Native Sarsaparilla).

FIBRE PREPARED FROM BARK OF—

- 2127 *Sterculia acerifolia* (The Flame Tree).
- 2128 ,, *diversifolia* (Victoria Bottle Tree).
- 2129 ,, *fœtida*.
- 2130 *Abutilon venosum* (Veined Lantern Flower).
- 2131 ,, *mollis* (Soft-leaved Abutilon).
- 2132 ,, *striatum* (Streaked Lantern Flower).
- 2133 ,, *Bedfordianum*.
- 2134 *Lagunaria Patersoni* (Norfolk Island Cow-itch Tree).
- 2135 *Bœhmeria nivea* (Chinese Grasscloth Plant).
- 2136 *Sparmannia Africana*.
- 2137 *Laportea gigas* (The Tree Nettle).
- 2138 *Sida retusa* (Queensland Hemp).

FIBRE PREPARED FROM LEAVES OF—

- 2139 *Doryanthes excelsa* (Spear Lily).
- 2140 *Phormium tenax* (New Zealand Flax).
- 2141 *Dianella latifolia*.
- 2142 *Cordyline indivisa* (Tall Palm Lily).
- 2143 *Fourcroya gigantea* (Giant Lily).
- 2144 *Agave Americana* (American Aloe).
- 2145 *Yucca gloriosa* (Adam's Needles).
- 2146 ,, *aloifolia* (Aloe-leaved Adam's Needle).
- 2147 ,, *filamentosa* (Thread-bearing Adam's Needle).
- 2148 *Pandanus utilis* (Screw Pine).
- 2149 *Dracœna draco* (Dragon's Blood Tree).
- 2150 *Cordyline pumilis* (Dwarf Palm Lily).
- 2151 *Astelia spe* (New Zealand).

FIBRE PREPARED FROM STEMS OF—

- 2152 *Caryota urens* (Jaggery Palm).
 2153 *Juncus vaginatus* (Small Sheathed Rush).
 2154 " " (Large Sheathed Rush).

FIBRE PREPARED FROM BARK OF—

- 2155 *Dombeya Natalensis*.
 2156 *Sterculia Delabechii* (Bottle Tree).
 2157 *Commersonia Fraseri* (Tye Plant).
 2158 *Sida pulchella* (Victorian Hemp).
 2159 *Hibiscus splendens* (Hollyhock Tree).
 2160 " *heterophyllus*.
 2161 *Plagianthus betulinus* (Ribbon Tree, or Lace Bark).
 2162 *Eucalyptus obliqua* (Stringybark).
 2163 " *fissilis* (Messmate).
 2164 *Pimelia axiflora* (Currijong).
 2165 *Pipturus propinquus* (Queensland Grasscloth Plant).

FIBRE PREPARED FROM LEAVES AND STEMS OF—

- 2166 *Lepidosperma flexuosa* (Slender Sword Rush).
 2167 *Cladium radula* (Black Reed).

TOW PREPARED FROM—

- 2168 Bark of *Sterculia diversifolia* (Victorian Bottle Tree).
 2169 " " *acerifolia* (N. S. Wales Home Tree).
 2170 Stem of *Cordyline indivisa* (Tall Palm Lily).
 2171 " *Caryota urens* (Jaggery Palm).
 2172 " *Boehmeria nivea* (Chinese Grasscloth Plant).
 2173 Bark of *Eucalyptus fissilis* (Messmate).
 2174 " " *obliqua* (Stringybark).
 2175 Leaves of *Dianella latifolia*.
 2176 Stems of *Juncus vaginatus* (the Sheathed Rush).

LANDS & AGRICULTURE, DEPARTMENT OF, Melbourne.

- 2177 *Acacia mollissima* (Wattle).
 2178 *Atherosperma moschata* (Sassafras).
 2179 *Banksia Australis* (Honeysuckle).
 2180 *Bedfordia salicina* (Cotton tree).
 2181 *Callitris verrucosa* (Murray Pine).
 2182 *Casuarina lespoclada* (Erect Sheoak).
 2183 *Eucalyptus gonicalyx* (Swamp Gum).
 2184 " *obliqua* (Stringybark).
 2185 " (Messmate).
 2186 " *rostrata* (Red Gum).
 2187 *Exocarpus cupressiformis* (Native Cherry).
 2188 *Fagus Cunninghami* (Australian Beech).
 2189 *Lomatia Fraserii* (Native Holly).
 2190 *Myrsine variabilis*.
 2191 *Notolæa ligustrina* (White-plum Wood).
 2192 *Olearia argophylla* (Musk).
 2193 *Panax sambucifolia* (Mountain Ash).
 2194 *Persoonea arborea* (Red-plum Wood).
 2195 *Pittosporum bicolor* (Cheesewood).

- 2196 *Pomaderris apetala* (Native Hazel.)
 2197 *Tasmannia aromatica* (Peppertree).
-

CLASS 601.—Ornamental woods used in decorating and for furniture; as veneers of mahogany, rosewood, ebony, walnut, maple, and madrona.

COMMISSIONERS FOR PHILADELPHIA EXHIBITION,
 Melbourne.

Boxes made of Victorian Woods, viz.:—

- 2198 *Pittosporum bicolor*.
 2199 *Exocarpus cupressiformis* (Cherry tree).
 2200 *Hedycarya Cunninghamii*.
 2201 *Senecia Bedfordii*.
 2202 *Acacia melanoxylon* (Blackwood).
 2203 *Eucalyptus inophloia*.
 2204 *Myrsine variabilis*.
 2205 *Lomatia Fraserii*.
 2206 Bastard Gum.
 2207 Stringybark.
 2208 Redgum.
 2209 Inlaid Box, with Curly Blackwood, Victorian Rosewood, *Lomatia Fraserii*, *Pittosporum bicolor*.
 2210 Paper Knives, made of Victorian woods.
 2211 Tubs made of Victorian Blackwood, Red Gum, and Blue Gum, to contain Tree Ferns.
-

CLASS 602.—Dye-woods, barks, and galls for colouring and tanning.

CLARK, JOHN, & SONS, Lonsdale-street East, Melbourne.

- 2212 Wattle Bark for tanning purposes.
 2213 Ground Wattle Bark „
-

CLASS 603.—Gums, resins, caoutchouc, gutta percha, vegetable wax.

BOTANIC GARDENS, DIRECTOR OF, Melbourne.

- 2214 Resin obtained from *Eucalyptus fissilis* (Messmate).
 2215 „ „ „ „ *amygdalina* (Stringy Gum, &c.)
 2216 „ „ „ „ *leucoxydon* (Milkwhite Gum.)
 2217 „ „ „ „ *viminalis* (Box, Weeping Gum,
 2218 „ „ „ „ „ Peppermint).
 2219 „ „ „ *Araucaria Cunninghamii* (Moreton Bay
 2220 „ „ „ „ Hoop Pine).
 2221 „ „ „ *Syncarpia laurifolia* (Turpentine Tree, New
 2222 „ „ „ „ South Wales).
 2223 „ „ „ *Eucalyptus Stuartii* (Apple-tree Gum).
 2224 „ „ „ „ *pulverulenta* (Powdery Gum).

- 2225 Gum obtained from *Panax sambucifolius* (Elderberry Ash).
 2226 „ „ „ *Grevillea robusta* (Silky Oak).
 2227 „ „ „ *Hakea gibbosa*.
 2228 „ „ „ *Corynocarpus lævigatus* (New Zealand Laurel).
 2229 „ „ „ *Acacia pycnantha* (Golden Wattle).
 2230 „ „ „ *Sterculia diversifolia* (Victorian Bottle Tree).
 2231 „ „ „ *Acacia dealtata* (Silver Wattle).
 2232 „ „ „ *Acacia decurrens* (Common Wattle).
 2233 Gum Sandarac obtained from *Callitris robusta* (Desert Pine).
 2234 „ „ „ „ *Callitris rhomboidea* (Native Cypress).
 2235 „ „ „ „ *Callitris Gunni* (Tasmanian Cypress).
 2236 „ „ „ „ *Callitris Gunni* (Tasmanian Cypress).
 2237 Oleo Resin obtained from the seeds of *Pittosporum undulatum*.
 2238 Oleo Fat „ „ „ *Sterculia diversifolia*.
 2239 Caoutchouc „ „ „ *Ficus macrophylla* (Moreton Bay Fig).

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 2240 Myall Gum.
 2241 Australian Rubber and Rubber Stamp.
 2242 Grass-tree Gum, in its crude state.

AGRICULTURAL PRODUCTS.

CLASS 620.—Cereals, grasses, and forage plants.

ADAMS, JAMES, Warring.

- 2243 White Tuscan Wheat.

BUCKLEY, EDWARD, Newbridge, Loddon.

- 2244 Red Straw Wheat, from the Loddon district, grown in the County of Gladstone.
 2245 Red Straw Wheat, grown in the County of Bendigo.

CONNOR, JAMES, Allansford.

- 2246 Foxtail Oats, grown at Merunga, near Warrnambool.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 2247 Grass-tree Plant.
 2248 Purple Straw Wheat.

GILMOUR, ANDREW, Colvinsky, Buangor.

- 2249 Oats, grown in the parish of Ballyrogan.

JACK, JOHN, Oxley Plains, Ovens District.

- 2250 Frampton White Wheat, grown on chocolate soil after English grass.

LAIDLAY, JOHN, Bundoora, Plenty-road.

2251 Wheat.

McNAIR, ANGUS, Bellerine East.

2252 New Fodder Pea ; yield, 45 bushels to the acre.

MONCRIEFF, JOHN, Tabilk, Goulburn River.

2253 Purple Straw Wheat.

2254 White Wheat.

MYRING, JOSEPH, Campbell's Creek, Castlemaine.

2255 Barley.

NORTH-EASTERN PASTORAL AND AGRICULTURAL
SOCIETY, Murchison.

2256 Wheat grown by J. M'Nab, Tabilk.

O'KEEFFE, ANDREW, Adelaide Vale, Clare Inn.

2257 Purple Straw Wheat.

POLSON, ANGUS, Chapman, Moyston.

2258 English Barley.

2259 Tartarian Oats.

2260 Purple Straw Wheat.

2261 White Wheat.

ROSSI, THOMAS, Dry Diggings, near Daylesford.

2262 Purple Straw Wheat.

SCHMITT, LOUIS, Mornington.

2263 Wheat.

SCOTT, JAMES, Indigo, Chiltern.

2264 Wheat, grown by the exhibitor.

ST. ARNAUD PASTORAL AND AGRICULTURAL SOCIETY,
St. Arnaud.

2265 Short Oats.

2266 Wheat.

2267 Barley.

STEWART & FERGUSON, Indigo, Chiltern.

2268 Wheat, grown by exhibitors.

TAYLOR, JOHN, Allansford.

2269 Adelaide Wheat, grown at Merunga, near Warrnambool.

WEST BOURKE PASTORAL AND AGRICULTURAL
SOCIETY, Romsey.

2270 White Tuscan Wheat, grown by the Hon. T. F. Hamilton,
M.L.C., President of the Society.

CLASS 623.—Tobacco, hops, tea, coffee, and spices.

ABORIGINAL MISSION STATION, Corranderrk.

- 2271 Victorian Hops, grown at the Corranderrk Aboriginal Mission Station.

M'KENZIE, JAS. F., & CO., 3 Queen-street, Melbourne.

- 2272 Eagle-brand Coffee.
 2273 Chicory, manufactured from root grown in Victoria.
 2274 Mixed Spice.
 2275 Ground Cinnamon.
 2276 Homœopathic Cocoa, manufactured from Trinidad nuts.
 2277 Chocolate, manufactured from Trinidad nuts.
 2278 Vanilla Chocolate Sticks, manufactured from Trinidad nuts.
 2279 Mustard, manufactured from seed grown in Victoria.

LAND ANIMALS.

CLASS 635.—Poultry and birds.

ST. JOHN, F., 22 Chetwynd-street, West Melbourne.

- 2280 Waterfowl.
 2281 *Stextonetta naevosa*. The Freckled Duck.
 2282 *Sarciophorus pateralis*. Black-breasted Plover.
 2283 *Anax superciliosa*. Black Duck.
 2284 *Spatula rhycolotes*. Shoveller.
 2285 *Biziura libata*. Musk Duck.
 2286 *Melachorynchus membranaceus*. Pink-eyed Duck.
 2287 *Dendrocygna Eytoni*. Tree Duck.
 2288 *Nyroca Australis*. White-eyed Duck.
 2289 *Casarca tadornoides*. Chestnut-coloured Sheldrake.
 2290 *Himantopus leucocephalus*. White-headed Silt.
 2291 *Podiceps Nestor*. Grebe.
 2292 *Turnix varius*, *Hemopodius varius*. P. Quail.
 2293 *Chlamydochea inbata*. Maned Grouse.
 2294 *Botaurus porcelotitus*. Australian Bittern.
 2295 Slim-palmated Goose. Magpie Goose.
 2296 *Erismature Australis*. Blue-billed Duck.
 2297 *Anas punctata*. Teal.
 2298 *Chorotis Australis*. Native Turkey.
 2299 *Hemopodius velox*. Little Quail.
 2300 *Mummenius cyanopus*. Australian Curlew.
 2301 *Porphyria bellus*. Azure-breasted Water Hen.
 2302 *Chenopsis atrata*. Black Swan.
 2303 *Recurvirostra rubricollis*. Red-necked Avocet.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
 EXHIBITION, Melbourne.

- 2304 Stuffed Waterfowl, by Chas. French.

GASKELL, JOSEPH, Elizabeth-street, Melbourne.

- 2305 Australian Snipe.

GRIMWOOD, THOMAS, Fern Tree Gully.

- 2306 Specimens of Quail, Snipe, Landrail.

ROBERTSON, W. W., 52 Bridge-road, Richmond.

- 2307 Collection of Australian Native Birds.

CLASS 637.—Wild animals.

GASKELL, JOSEPH, 118 Elizabeth-street, Melbourne.

- 2308 *Macropus major*, Common Kangaroo. Old Man.
 2309 *Halmaturus wallabatus*. Bush-tailed Wallaby.
 2310 *Phalangista vulpina*. Opossum.
 2311 *Dasyurus maculatus*. Tiger Cat.
 2312 *Pteropus poliocephalus*. Vampire Bat.

GODFREY, F. R., Melbourne.

- 2313 *Phalangista vulpina*. Opossum.
 2314 *Phascolarctos cineri*. Native Bear.
 2315 *Dasyurus viverrina*. Native Cat.
 2316 *Belideus breviceps*. Short-headed Belideus.
 2317 *Echidna*. Porcupine Anteater.
 2318 *Belideus notatus*. Flying Squirrel.

M'COY, PROFESSOR, Melbourne University.

- 2319 *Canis Dingo*. Wild Dog.
 2320 *Dromanis Australis*. Emu.
 2321 *Grus Australasianus*. Native Companion.
 2322 *Chenopsis atratus*. Black Swan.

CLASS 638.—Insects, useful and injurious. Honey bees, cochineal silk worms.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 2323 Manna, with the insect producing it.

FRENCH, C., Botanic Gardens, Melbourne.

- 2324 Australian Longicorns, buprestidal, &c.—the majority destructive to timber by boring.
 2325 Australian Lepidoptera.

TIMBRELL, ANN, Plenty Road, Collingwood.

- 2326 Japan Black and White Silkworms, modelled in wax.

MARINE ANIMALS, FISH CULTURE, AND APPARATUS.

CLASS 641.—Fishes, living or preserved.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

2327 Brown Trout, preserved in glass globe.

ST. JOHN, F., 22 Chetwynd-street, Melbourne.

- 2328 *Lates antarcticus*, Cast. Sea Perch.
 2329 *Enoplosus armatus*, White. Bastard Dorey.
 2330 *Arripis Georgianus*, Cuv. and Val. The Roughy.
 2331 *Arripis truttaceus*, Cuv. and Val. Salmon and Salmon Trout.
 2332 *Oligorus Macquariensis*, Cuv. and Val. Murray Cod.
 2333 *Dules auratus*, Cast. Murray Golden Perch.
 2334 *Therapon Niger*, Cast. Murray Black Perch.
 2335 *Therapon Richardsoni*, Cast. Murray Silver Perch.
 2336 *Upenachthys porosus*, Cuv. and Val. Red Gurnet.
 2337 *Neotephraeops zebra*, Richard. Zebra Fish.
 2338 *Chrysophrys Australis*, Gunther. Bream.
 2339 *Chironemus marmoratus*, Gunther. Kelp Fish.
 2340 *Cheilodactylus nigricans*. Butter Fish.
 2341 *Latris Forsteri*, Cast. Bastard Trumpeter.
 2342 *Platycephalus Richardsonii*, Cast.
 2343 *Platycephalus Basensis*, Cuv. and Val. Common Flathead.
 2344 *Platycephalus lævigatus*, Cuv. and Val. Rock Flathead.
 2345 *Trigla Polyomma*, Richard. Flying Gurnet.
 2346 *Lepidotrigla Vanessa*, Richard. Small Gurnet.
 2347 *Sillago punctata*, Cuv. and Val. Whiting.
 2348 *Sphyræna Novæ-Hollandia*, Gunther. Pike.
 2349 *Thursites Atun.*, Euph. Barracouta.
 2350 *Hestiopterus recurvirostris*, Richard. Boar Fish.
 2351 *Seriola grandes*, Cast. Yellow Tail.
 2352 *Caranx Georgianus*, Cuv. and Val. Silver Bream.
 2353 *Temnodon saltator*, Bloch. Skip Jack.
 2354 *Neptonemus travale*, Cast. Travale.
 2355 *Cristiceps multifenestratus*, Cast. Blenny.
 2356 *Agenostoma Diemensis*, Richard. Mullet.
 2357 *Glyphesodom Victoriae*, Gunther. Rock Perch.
 2358 *Labrichthys Bleekeri*, Cast. Parrot Fish.
 2359 *Odax Richardsoni*, Gunther. Stranger.
 2360 *Olethrops cyanomelas*, Richard. Elegant Stranger.
 2361 *Genypterus Australis*, Cast. Rock Line.
 2362 *Plueronectes Victoriae*, Cast. Flounder.
 2363 *Copidaglanis tandanus*, Mich. Murray Cat Fish.
 2364 *Gonorynchus Greyi*, Richard. Sand Eel.
 2365 *Chattoessas Erebi*, Gunther. Bony Bream.
 2366 *Scombresox*.
 2367 *Callionymus calauropomus*.
 2368 *Rhina squattina*, Bellon. Angel Shark.
 2369 *Neocorrassius ventricosus*, Cast. Carp.

ANIMAL AND VEGETABLE PRODUCTS.

(Used as food or as materials.)

CLASS 651.—The dairy.—Milk, cream, butter, cheese.

BIRD, GEORGE, Inkerman, Lyndhurst.

2370 Colonial-made Cheese.

PIERCE, G. G., Bourke-street East, Melbourne.

2370A Cheese from the Heidelberg Factory.

RIDDLE, J., Lancefield.

2371 Cheese.

CLASS 652.—Hides, furs, and leather, tallow, oil, and lard, ivory, bone, horn, glue.

BREARLEY BROS., Geelong.

2372 Sole Leather.

CLARK, JOHN, & SONS, Lonsdale-street East, Melbourne.

2373 Sole Leathers.

2374 Kip Leather.

2375 Calfskins.

2376 Kangaroo Skins.

2377 Wallaby Skins.

2378 Sheepskins.

2379 Harness Leather.

2380 Basils.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA
EXHIBITION, Melbourne.

2381 Rugs made from the Skins of Victorian animals, viz., Kangaroo, Wallaby, Opossum, Native Cat, Native Bear, &c.

DUNCKLEY & M'BRIDE, 28 A'Beckett-street East, Melbourne.

2382 Sash Lines.

2383 Whip Gut.

2384 Gut Lathe Bands.

2385 Sausage Casings.

FINK, M., Geelong.

2386 Skins of the Wallaby, Native Cat, Native Bear, and Opossum.

FITTS, CHARLES, & SONS, 67 Cecil-street, Emerald Hill.

2387 Glue.

PEARSE BROS., Fremantle, Western Australia.

2388 Dugong Fish Hide.

2389 Black Harness Leather.

- 2390 Black Grained Kip.
- 2391 Wax Kangaroo Skins.
- 2392 Wax Calf Skins.
- 2393 Wax Grained Kip.
- 2394 Grained Kangaroo Skins.
- 2395 Grained Calf Skins.

PENAL DEPARTMENT, INSPECTOR-GENERAL OF,
Melbourne.

- 2395A Skins of Leather.
- 2395B Calf, Kip, Harness, Black Leather, and Sole Leather.

QUINN, H. S., Newton-street, Richmond.

- 2396 Dyed and White Wool Mats, consisting of bright canary, dark amber, roan, magenta, violet, and white.
- 2397 Kangaroo Glove Leathers.

WALLIS & COMPANY, Burnley-street, Richmond.

- 2398 Shoe Leathers, in calf, goat, sheep, kid, kangaroo, wallaby, native cat, and morocco.
- 2399 Furniture Leathers, in moroccoes and roans.
- 2400 White Angora Goatskin Mat.
- 2401 Morocco Leathers, for bookbinding, pocket-books, jewel-cases, &c., &c.

CLASS 657.—Flour; crushed and ground cereals, decorticated grains.

BODDY, EDWARD, Nagambie.

- 2402 Fine Flour.

HOOD (F. & J.), 81 Elizabeth-street North, Melbourne.

- 2403 Victorian-made Malt.

MARTIN, P. J., Little Flinders-street East, Melbourne.

- 2404 Victorian Malt.

McKENZIE, JAS. F., & CO., 3 Queen-street, Melbourne.

- 2405 Oatmeal, manufactured from Colonial oats.
- 2406 Groats, manufactured from Colonial oats.
- 2407 Brosemeal.

MYRING, JOSEPH, Campbell's Creek, Castlemaine.

- 2408 Colonial Malt.

PERRIN, WM., JUN., Stephenson-street, Richmond.

- 2409 Victorian Malt, made from Victorian and New Zealand grown barley.

CLASS 656.—Preserved meats, vegetables, and fruits. Dried, or in cans or jars. Meat and vegetable extracts.

BENNETT, T. K., Bourke-street, Melbourne.

- 2410 Preserved Meats, consisting of Roast Beef, Boiled Beef, Corned Beef, Boiled Mutton, Roast Mutton, Ox-tail Soup, Mock Turtle Soup, and Potted Head.

BOTANIC GARDENS, DIRECTOR OF, Melbourne.

- 2411 Jam made from Kail Apples.

COMPORT, HENRY, Cheltenham.

- 2412 Tomato Sauce.

GRANT, MRS., Bridge-road, Richmond.

- 2413 Tomato Sauce.

LYON, GEORGE, Beechworth.

- 2414 Tomato Sauce.

MELBOURNE MEAT PRESERVING COMPANY, 56 Queen-street, Melbourne.

- 2415 Preserved Meats.

STRINGER & CO., 43 King-street, Melbourne.

- 2416 Mixed Pickles.
2417 Sauces.
2418 Curry Powder.

WATSON & PATERSON, Bourke-street West, Melbourne.

- 2419 Hams.
2420 Middles of Bacon.
2421 Mess Pork.

WESTERN MEAT PRESERVING COMPANY (Limited), Colac.

- 2422 Preserved Meats, comprising Roast Beef, Corned Beef, Roast Turkey, Ox-tail Soup, Brown Rabbit Soup, &c.

WRIGHT, PAYNE, & CO., Chapel-street, South Yarra.

- 2423 Jams, made from Victorian fruits, consisting of golden drop, raspberry, green-gage, plum, damson, violet plum, magnum bonum plum, black currant, and gooseberry.

ZORN, EDWARD, Clayton's Road, near Oakleigh.

- 2424 Tomato Sauce.
2425 Zorn's Oakleigh Sauce.

CLASS 660.—Wines, alcohol, and malt liquors.

[The following report of the Wine Jury at the Melbourne Inter-colonial Exhibition of 1875, is published for the purpose of informing visitors as to the strength and character of the wines of Victoria.] The jurors consisted of the following gentlemen :—

W. S. Bailey, Esq.	Thomas Cooper, Esq.	Lesley A. Moody, Esq.
Dr. J. Blair.	Dr. Wm. Gilbee.	W. J. O'Hea, Esq.
Rev. J. I. Bleasdale, D.D.,	R. K. Hammond, Esq.	J. A. Panton, Esq., P.M.,
Chairman.	F. C. Klemm, Esq.	Vice-Chairman.
B. C. Burstall, Esq.	Captain Middlemiss.	

In Department 4—Wine—there were altogether 271 exhibits; 48 being from New South Wales, 68 from South Australia, and 155 contributions from Victoria. These embraced wines of great variety, viz., Carbinet, Sauvignon, Hermitage or Schiraz, Pineau or Burgundy, Riesling, Verdeilho, Chasselas, Aucarot, Tokay, &c., but with the exception of some samples of Carbinet, Hermitage, and Riesling, grown in Victoria, few of them were found to resemble the European products from the same grape.

The wines of New South Wales showed in all the features of a first-class wine, marked superiority, as is shown by the proportion of prizes to the number of exhibits. Many of them are characterised by great delicacy of flavour, are clean and cool on the palate, and possess just sufficient tartar to render them most refreshing tonics.

The wines of the Albury District deserve special mention, as, in our opinion, they are unsurpassed for general excellence in all qualities required for commercial puposes. We would pronounce them rich, generous, well made wines, velvety, and clean on the palate, but somewhat deficient in tartar. None of them have as yet developed much bouquet; but this want is compensated by the valuable properties which we have already accorded to them.

South Australia has gained no less than 45 prizes out of 68 exhibits. We note that the most successful of the wines from this colony are blends or mixtures of two or three sorts of grapes. These wines have a strong vinous bouquet, are rich in colour, and possess a large proportion of tannin. The red wines of South Australia may be classed with the wines of the Douro; indeed so much do some of these wines resemble those of Spain and Portugal (although not grown from the same description of grapes), that in the case of one sample it was found necessary for the satisfaction of the Jurors to telegraph to the exhibitor, in order to make certain of the fact that it was a pure Australian-grown wine.

With respect to the wines of Victoria, we have pleasure in observing what appears to us a marked improvement in their preparation and after treatment. The wines from the north of the Dividing Range maintain the high standard for which they have been known for many years. Owing to the great variety of climate and the abundance of fine aspects for vineyards in the general contour of the country, Victoria is fortunately capable of producing, and does produce, wines which can be advantageously classified with many of the well-known European wines. The wines grown south of the Dividing Range are well represented in

this Exhibition, and have carried off a large proportion of prizes. They are light-bodied, mellow-flavoured, rich in colour (ruby and light golden), have a fine aroma, and are particularly adapted for general use in our climate.

It has been remarked in a report of the Wine Jury of 1873, that it "would be desirable that the peculiar and best produce of the various wine districts should be determined, so that wine growers and persons desirous of forming vineyards should know the vines best suited to each locality; with a view, as is the case in the various communes of France, of producing only the best growths the districts will yield." We have pleasure in referring you to the valuable tables accompanying this report, which will be found to form a good guide in this respect, as they fully illustrate the character of the exhibits, and also furnish information as to their history and origin.

These tables have been prepared by Mr. Butterfield, the cellarman, and we cannot close this report without bearing testimony to the excellent manner in which the duties devolving on that functionary were carried out, and which were most ably seconded by Mr. Johnston, the Jury Clerk.

J. A. PANTON, Vice-Chairman.

No. I.

TABLE SHOWING THE NAMES OF EXHIBITORS OF WINES TO WHOM PRIZES HAVE BEEN AWARDED, THE NUMBER OF THEIR ENTRIES, NAME OF DISTRICT, AND CLASSIFICATION OF PRIZES.

NEW SOUTH WALES.										
Name of Exhibitor.			No. of Entries.	District.	1st.	Class.			4th.	Total.
Alexander Munroe	...	...	8	—	—	1	2	1		4
Carmichael Brothers	...	...	4	—	4	—	—	—		4
Wadham Wyndham	...	...	2	—	—	2	—	—		2
James T. Fallon	...	...	8	—	8	—	—	—		8
Carl J. P. Brecht	...	...	3	—	—	1	1	1		3
Montague Parnell	...	...	4	—	1	—	2	—		3
George Wyndham	...	...	4	—	2	—	—	1		3
E. Greer and Co.	...	...	12	—	9	—	2	1		12
Totals	...	...	45	...	24	4	7	4		39
VICTORIA.										
Joseph Best	...	...	2	Ararat	1	—	1	—		2
Trouette and Blampied	..	...	12	"	1	2	—	—		3
J. Mackiehan	...	...	1	"	—	—	1	—		1
Henry Evans	...	...	2	Beechworth	1	—	—	—		1
F. G. and J. B. Docker, Wangaratta	...	...	4	"	—	1	1	1		3
Otto Jung, Chinaman's Creek	...	...	4	Castlemaine	1	1	—	—		2
E. Schroeder, Chinaman's Flat	...	...	2	"	—	—	2	—		2
Fabrizio Crippa, Hepburn...	...	...	1	"	1	—	—	—		1
Francis Mellon, Dunolly	...	...	3	"	1	1	1	—		3
William Botten, Loddon River	...	...	2	"	—	1	—	—		1
T. Meredith, Chewton	...	...	2	"	1	—	—	—		1
Carried forward	...	...	35		7	6	6	1		20

VICTORIA—(continued.)

Name of Exhibitor.	No. of Entries.	District.	Class.				Total.
			1st.	2nd.	3rd.	4th.	
Brought forward ...	35		7	6	6	1	20
John Vettler ...	12	Echuca	2	2	4	—	8
Jacob Deppeler, Gheringhap ...	2	Geelong	—	1	1	—	2
Charles Craike, Lynburn ...	2	"	—	—	—	2	2
Jacob Weber, Leigh Road ...	2	"	1	—	—	—	1
John Ritchie, Murgheboluc ...	2	"	1	—	—	—	1
Bear and Ford, Tabilk ...	8	Goulburn	—	1	3	—	4
Frederick Egli, Tabilk ...	1	"	1	—	—	—	1
*Charles Brache ...	1	"	—	—	1	—	1
E. Brensing, Goulburn Valley ...	2	"	—	—	—	1	1
Franz Schmitt, Berwick ...	2	Melbourne	1	—	—	—	1
J. S. Johnston, Sunbury ...	4	"	2	2	—	—	4
Charles Maplestone, Ivanhoe ...	8	"	1	2	3	1	7
St. Hubert's Vineyard Co., Yering	4	"	3	—	—	—	3
*Charles Brache, Sunbury ...	1	"	1	—	—	—	1
E. G. Snowden, Boroondara ...	3	"	—	1	—	1	2
John Davies, Moonee Ponds ...	4	"	—	—	1	2	3
Charles Francis, Sunbury ...	2	"	1	—	1	—	2
G. S. Smith, Wahgunyah ...	2	Murray	1	—	—	—	1
George Spink, Tarrawingee ...	2	"	—	1	—	—	1
Adolph Fuchs, Strathfieldsaye ...	3	Sandhurst	2	1	—	—	3
Carl Pohl, Strathfieldsaye ...	12	"	3	3	3	1	10
Wm. Greiffenhagen, Strathfieldsaye	4	"	1	1	—	2	4
William Jones, Sheepwash ...	4	"	—	—	1	—	1
F. R. Shaw, Goornong ...	1	"	1	—	—	—	1
A. Bruhn, Strathfieldsaye ...	8	"	2	2	2	—	6
Frederick Grosse, Strathfieldsaye	3	"	2	—	1	—	3
August Fisher, Strathfieldsaye ...	6	"	2	1	2	—	5
Totals ...	140	...	35	24	29	11	99

* Two entries, under two districts.

SOUTH AUSTRALIA.

Joseph Gilbert ...	6	—	2	1	1	2	6
W. B. Rounseville ...	3	—	—	1	1	—	2
J. W. Richman ...	6	—	—	4	1	1	6
T. Hardy ...	4	—	3	—	—	—	3
J. D. Holbrook ...	6	—	1	2	1	—	4
J. H. Kaines ...	1	—	—	1	—	—	1
William Jacob ...	2	—	—	1	1	—	2
E. Wright ...	2	—	2	—	—	—	2
Mrs. Baker ...	6	—	2	—	2	—	4
S. Davenport ...	3	—	1	2	—	—	3
J. Gillard ...	7	—	5	1	—	1	7
P. Auld ...	6	—	2	—	1	1	4
G. White ...	2	—	1	—	1	—	2
G. L. Barnard ...	2	—	—	—	1	1	2
G. F. Ind ...	2	—	1	—	1	—	2
R. D. Ross ...	6	—	1	2	—	1	4
C. B. Young ...	2	—	1	—	—	—	1
Totals ...	66	...	22	15	11	7	55

No. II.

TABLE SHOWING THE CLASSES OF WINES.

Name of Wine.	1874.	1873.	1872.	1871.	1870.	1869 and older.	Total	I. Class.	II. Class.	III. Class.	IV. Class.	Total.
VICTORIA. <i>White.</i>												
Mixed ...	2	1	2	4	2	1	12	—	1	2	2	5
Riesling ...	5	1	8	7	2	3	26	6	4	4	3	17
Chasselas ...	4	3	—	1	—	2	10	2	—	1	—	3
Verdeilho ...	3	5	4	1	—	1	14	3	5	2	2	12
White Nice ...	—	—	—	—	1	—	1	—	—	—	—	—
Sherry ...	—	—	—	1	—	—	1	—	—	—	—	—
Pedro Ximenes ...	—	1	—	—	—	—	1	—	—	—	—	—
Ugni Blanc ...	—	—	1	—	—	—	1	—	—	1	—	1
Roussette ...	—	—	—	1	—	—	1	1	—	—	—	1
	14	11	15	15	5	7	67	12	10	10	7	39
<i>Red.</i>												
Hermitage ...	8	8	5	8	4	2	35	16	6	6	1	29
Carbinet ...	2	3	—	1	1	—	7	1	1	2	—	4
Gamais ...	—	1	—	—	1	—	2	—	—	—	—	—
Mourvedre or Esparte ...	—	—	1	—	—	—	1	—	—	1	—	1
Mataro ...	2	1	1	2	—	—	6	—	1	1	1	3
Mixed ...	2	3	2	1	1	3	12	2	2	4	—	8
Burgundy ...	1	2	1	1	1	1	7	1	1	2	1	5
Shiraz* ...	—	—	2	1	1	1	5	1	2	1	1	5
Black Cluster ...	—	—	—	1	—	—	1	—	—	—	—	—
Malvoise ...	1	—	—	—	—	—	1	—	—	—	—	—
Grenache ...	—	1	1	—	1	—	3	1	—	1	—	2
Leverdun or Gloria of Australia ...	—	—	1	—	—	—	1	—	—	1	—	1
Pineau ...	—	—	1	—	—	—	1	—	1	—	—	1
Malbec ...	—	—	2	—	—	—	2	—	—	—	—	—
Muscatel ...	—	—	—	—	—	1	1	1	—	—	—	1
	16	19	17	15	10	8	85	23	14	19	4	60
NEW SOUTH WALES. <i>White.</i>												
Shiraz ...	2	—	1	—	—	—	3	—	1	—	—	1
Riesling ...	2	—	2	—	1	3	8	5	—	2	—	7
Pineau ...	1	3	—	—	—	—	4	—	—	2	1	3
Mixed ...	—	—	1	—	—	—	1	—	—	—	—	—
Madeira ...	—	—	—	1	—	1	2	1	—	1	—	2
Aucarot ...	—	—	1	1	—	1	3	3	—	—	—	3
Tokay ...	—	—	—	—	—	2	2	2	—	—	—	2
Muscat ...	—	1	—	—	—	—	1	1	—	—	—	1
Verdeilho ...	—	2	—	—	—	—	2	—	—	1	1	2
	5	6	5	2	1	7	26	12	1	6	2	21
<i>Red.</i>												
Verdot ..	1	—	—	—	—	—	1	—	—	—	—	—
Hermitage ...	2	—	1	—	1	1	5	1	1	—	1	3
Malbec ...	—	—	2	—	—	1	3	2	1	—	—	3
Shiraz ...	—	1	2	1	—	1	5	5	—	—	—	5
Mixed ...	—	2	1	—	—	—	3	2	1	—	—	3
Lambasquat ...	1	—	—	—	—	—	1	—	—	—	1	1
Burgundy ...	—	2	—	—	—	—	2	1	—	1	—	2
Carbinet ...	—	1	—	—	—	—	1	1	—	—	—	1
	4	6	6	1	1	3	21	12	3	1	2	18

Name of Wine.	1874.	1873.	1872.	1871.	1870.	1869 and older.	Total	I. Class.	II. Class.	III. Class.	IV. Class.	Total
SOUTH AUSTRALIA.												
<i>White.</i>												
Riesling ...	—	—	3	1	—	3	7	—	3	2	1	6
Verdeilho ...	1	—	1	—	1	1	4	1	1	1	1	4
White Spanish ...	—	—	—	—	1	—	1	—	—	1	—	1
Grenache ...	—	—	—	1	1	—	2	—	1	—	1	2
Mixed ...	—	4	1	2	2	2	11	4	2	2	2	10
Pedro Ximenes ...	—	—	—	—	—	1	1	1	—	—	—	1
Dorodilla ...	—	—	—	—	—	1	1	—	—	1	—	1
Muscat Gordo Blanco ...	—	—	—	—	—	1	1	1	—	—	—	1
Gouais ...	—	—	—	1	—	—	1	1	—	—	—	1
Muscatel ...	—	1	—	1	—	—	2	2	—	—	—	2
Madeira ...	—	—	—	1	—	—	1	—	—	—	1	1
	1	5	5	7	5	9	32	10	7	7	6	30
<i>Red.</i>												
Mixed ...	—	2	4	4	5	6	21	8	2	3	1	14
Carbinet ...	—	—	—	—	1	1	2	1	1	—	—	2
Shiraz ...	—	—	—	1	2	3	6	1	3	1	—	5
Black Portugal ...	—	—	—	—	1	—	1	—	—	—	—	—
Hermitage ...	—	1	—	—	—	—	1	—	—	1	—	1
Mataro ...	—	—	1	—	—	—	1	—	—	—	—	—
Belos Blanco ...	—	—	—	—	—	1	1	—	1	—	—	1
Frontignac ...	—	1	—	1	—	—	2	2	—	—	—	2
Red Madeira ...	—	—	1	—	—	—	1	—	—	—	—	—
	—	4	6	6	9	11	36	12	8	4	1	25

*Shiraz same grape as Hermitage.

No. III.

LIST OF PRIZES AWARDED FOR EXHIBITION OF WINES.

Class.	Victoria.	No.	New South Wales.	No.	South Australia.	No.	Totals.
Light White ...	First Prize	7	First Prize	2	First Prize	1	10
" "	Second "	3	Second "	1	Second "	3	7
" "	Third "	7	Third "	2	Third "	5	14
" "	Fourth "	4	Fourth "	—	Fourth "	4	8
Totals ...		21		5		13	39
Light Reds ...	First Prize	2	First Prize	1	First Prize	3	6
" "	Second "	3	Second "	1	Second "	2	6
" "	Third "	9	Third "	—	Third "	—	9
" "	Fourth "	3	Fourth "	—	Fourth "	—	3
Totals ...		17		2		5	24
Full Whites ...	First Prize	5	First Prize	10	First Prize	9	24
" "	Second "	7	Second "	—	Second "	4	11
" "	Third "	3	Third "	4	Third "	2	9
" "	Fourth "	3	Fourth "	2	Fourth "	2	7
Totals ...		18		16		17	51

No. 3—(continued.)

Class.	Victoria.	No.	New South Wales.	No.	South Australia.	No.	Total.
Full Reds ...	First Class ...	21	First Class ...	11	First Class ...	9	41
" "	Second „ ...	11	Second „ ...	2	Second „ ...	6	19
" "	Third „ ...	10	Third „ ...	1	Third „ ...	4	15
" "	Fourth „ ...	1	Fourth „ ...	2	Fourth „ ...	1	4
Totals ...		43		16		20	79
Totals of Prizes in the Four Classes }	First Prizes ...	35	First Prize ...	24	First Prize ...	22	81
	Second „ ...	24	Second „ ...	4	Second „ ...	15	43
	Third „ ...	29	Third „ ...	7	Third „ ...	11	47
	Fourth „ ...	11	Fourth „ ...	4	Fourth „ ...	7	22
Grand Totals		99		39		55	193

SYNOPSIS.—No. IV.

Colony.	1874.				1873.				1872.				1871.				1870.				1869 and older.					
	No. of Exhibits.	1st Class.	2nd Class.	3rd Class.	4th Class.	No. of Exhibits.	1st Class.	2nd Class.	3rd Class.	4th Class.	No. of Exhibits.	1st Class.	2nd Class.	3rd Class.	4th Class.	No. of Exhibits.	1st Class.	2nd Class.	3rd Class.	4th Class.	No. of Exhibits.	1st Class.	2nd Class.	3rd Class.	4th Class.	
WHITE																										
N.S. Wls.	5	...	...	2	...	6	1	...	2	2	5	2	1	1	...	2	1	...	1	...	1	7	7	...	...	...
Victoria.	14	1	2	4	1	11	2	1	1	2	15	1	5	2	2	15	5	2	2	1	5	7	2	...	...	...
S. Aust..	1	1	...	...	...	5	2	...	1	1	5	1	1	2	...	6	3	2	1	...	8	7	1	2	1	3
RED—																										
N.S. Wls.	4	...	...	...	1	6	4	1	1	...	6	4	2	...	...	1	1	...	...	...	1	3	3	...	...	...
Victoria.	16	4	3	2	...	19	6	1	5	2	17	1	3	6	...	15	7	3	2	2	10	8	3	2	2	...
S. Aust..	...	...	...	...	...	4	1	1	...	1	6	1	1	2	...	6	2	1	...	...	9	6	3	3	...	...

REPORT ON ALCOHOLIC ANALYSIS OF AUSTRALIAN WINES.

BY LESLEY A MOODY, CHIEF INSPECTOR OF DISTILLERIES, MELBOURNE.

THE Distillates of Australian Wines placed in the Exhibition by the kind permission of the Commissioners, owe their origin to a request made by J. T. Fallon, Esq., and Messrs. Greer and Co., of Albury, to the Hon. the Commissioner of Trade and Customs, to allow me to test the alcoholic strength of wines produced at Albury and its neighbourhood, in conjunction with the Chief Inspector of Distilleries of New South Wales, in order to determine, if possible, the question as to the extent of alcohol which those wines would develop by natural fermentation only.

The official sanction having been obtained, I proceeded to Albury, but some misapprehension having arisen as to the time of meeting

between Mr. Lumsdaine and myself, I found that he could not arrive for some days, and my other official avocations not permitting delay, I was obliged to commence operations without his valuable assistance.

The period of my visit was rather early in the vintage, when the earlier grapes were being cut.

On due consideration, I came to the conclusion that the best and most reliable test, and to which the least objection could be taken, would be of a wine produced from a must, the fermentation of which should in all its stages be conducted under my own immediate charge. I therefore had some of the several kinds of grapes which were being gathered at the time, cut, pressed, and put into jars in my own presence; these jars were at once removed, by me, and placed where they could not be tampered with, and afterwards taken by myself to Melbourne, where they were in my own charge until distilled.

Mr. Lumsdaine, having arrived shortly before my leaving, agreed with me in the course I had adopted, and at a later period of the vintage proceeded in a similar manner, and obtained a number of samples which he placed under the charge of J. Singleton, Esq., the superintendent of police and inspector of distilleries, Murray district, from whose charge I personally received them on a subsequent visit, and conveyed them to Melbourne, where they were placed with the others before mentioned.

A strictly reliable officer of my department, Mr. George Heath, who was on an official visit to the Northern district of Victoria, was instructed to procure, in a similar manner, samples of musts from the vineyards visited on his inspection, which were similarly treated.

The certificates of Messrs. Singleton and Heath are subjoined to a report made by me to the Hon. the Commissioner of Trade and Customs, which is hereto appended.

In addition to the produce of musts thus officially collected, it appeared to me that it would not be unsatisfactory to extend my operations so as to embrace, if possible, all the various descriptions of representative wines of Victoria, and therefore requested those interested to forward me samples of such wines as they desired tested, and to which they could assure me no adventitious spirit had been added in any way.

The result corroborates an opinion which I had entertained for some time, that the natural wines of the Northern portions of Victoria develop more alcohol than natural wines have been generally considered to be capable of doing, and range much higher in this respect than the British Customs standard of 26 per cent. of proof.

The British Customs process has been carefully followed in the test, and the result calculated according to Sikes's Tables, used by the British Excise.

If the Exhibition Commissioners consider my labour to be of any practical benefit to the colony, in as far as wine production is concerned, it would gratify me by allowing this report, and the result, a copy of which is appended, to appear in the Official Record of the Exhibition.

LESLEY A. MOODY.

Office of Chief Inspector of Distilleries,
Melbourne, October, 1875.

REPORT.

Office of Chief Inspector of Distilleries,
Melbourne, 4th September, 1875.

To the Assistant Commissioner of Customs.

SIR,—In pursuance of the investigation of the alcoholic strength of Australian wines, a progress report of which was made by me on the 10th June last, I have now the honour to state that, assisted by Mr. George Heath, inspector of distilleries, I have completed the alcoholic analysis of 201 samples of must and wine collected from various vineyards throughout the colony, and the district of Albury, N.S.W., of which I append a tabulated statement.

Of these, 25 are the produce of musts which were collected in the Beechworth and Murray districts, as stated in my report above-mentioned, and treated in a similar manner to those collected by Mr. H. Lumsdaine, the inspector of distilleries of New South Wales, and myself, in the neighbourhood of Albury. A certificate, signed by Mr. Heath, is appended. The remaining 165 are from wines sent to me from the various vineyards and persons enumerated, the senders having assured me that the wines were perfectly pure, without any addition of adventitious spirit.

Some few samples forwarded were so exceptional in spirit contents, that, having no written assurance of their not being fortified, I omitted them from the list.

The quality of the wines tested was in general very good, and in many cases might be called excellent.

The speciality of most of the produce of the vineyards situated in the northern portion of the colonies is that it is full-bodied, rich, and fruity; caused, doubtless, by the greater warmth and dryness of climate there, which ripen the grape thoroughly, and give a high gravity of must. The characteristics of these wines are similar to those of Spain and Portugal, while those made in the southern districts resemble the wines in Germany and the Rhine, and the northern and midland districts of France.

The produce of the same description of grape grown in the districts to the north of the Dividing Range, and that grown to the southward or seaward side, makes wine of a distinctive character.

My experience of some years of the vineyards of the colony leads me to the conclusion that the character of the wine made is improving year by year; and as Victoria possesses soils and climates of such variety, and so suitable for the growth of wines of so many descriptions, and of a superior class, I am sanguine of a great future for this produce when greater experience, knowledge, and capital are brought to bear on it, and vignerons can be induced to see the policy of limiting their vines grown to those only which experience shows to be suitable to the soil and climate of their vineyards.

A few good wines will find a readier market, be easier and more cheaply manufactured, and therefore more profitable, than a large variety of medium quality.

The return which accompanies this letter shows that the musts collected by Mr. Lumsdaine, Mr. Heath, and myself, which were pressed in our presence and fermented under our charge, and therefore could not have been tampered with by interested persons, contains a percentage of proof spirits much higher than it has hitherto been supposed a wine would develop naturally, the limit, unless under exceptional circumstances, being supposed not to exceed 26 per cent. (Mr. J. B. Keene, of H. M. Customs, London, considers that the cases in which the wines of Australia are past the strength of 28 per cent. of proof spirit naturally are so rare as to be quite isolated.) It cannot, therefore, be now said that wines which exceed that limit are necessarily artificially fortified. I believe that the practice of fortifying wines in Victoria is by no means general, and only resorted to to bring up wines of a low and inferior quality, and for particular trades; the better class of wines do not require it.

The process adopted in the alcoholic analysis of the wines is similar to that pursued by the Customs in England for ascertaining duty, and laid down by Mr. J. B. Keene in his work on gauging, and has been carefully followed out, except that the hydrometer has not been wholly depended on, each sample of the distillate having been weighed to the tenth of a grain, and the strength calculated by specific gravity, and according to Sikes's tables.

The instruments used were stills similar to those employed by the Customs in England, thermometer and specific gravity bottles tested at the Melbourne Observatory and delicate Oertling balance; and in order to ensure the greatest amount of accuracy, the experiments were conducted by Mr. Heath and myself at our respective private residences, where our attention would not be disturbed by our ordinary official work.

Having completed so far my portion of the work, I trust that the vignerons will not let the matter rest here, but will enlist the services of a chemist to show the chemical constituents of their produce, as I believe much prejudice exists on the subject. I am of opinion that many of the Victorian wines possess valuable qualities for medical purposes.

The distillates have been placed in cases in the present Exhibition, the Commissioners of which have kindly allotted space for the purpose, and will also, I hope, permit the result of the analysis to appear in their official records.

I have the honour to be, Sir,

Your most obedient servant,

LESLEY A. MOODY,
Chief Inspector of Distilleries.

Office of Chief Inspector of Distilleries,
Melbourne, 1st September, 1875.

I hereby certify that the distillates numbered 106 to 130 (25) in the accompanying list are from the produce of grapes collected in the Murray and Beechworth districts of Victoria in April 1875, and the juice pressed out before me. The musts, as pressed, were given into my charge, in which they remained till distilled in August in this year, and the percentage of proof spirits, British standard, carefully determined according to the English Customs formula. I further certify that no adventitious spirits whatever have been added to any of the samples referred to.

GEORGE HEATH,
Inspector of Distilleries.

I hereby certify that I obtained the samples of musts referred to in the accompanying statement, marked—F 1, Pineau; F 2, Muscat; F 3, Verdeilho; S 4, Aucarot; S 5, Verdeilho; B 7, Verdeilho; R 8, Verdeilho, from J. Singleton, Esq., inspector of distilleries, Murray district; that I brought them from Albury under my own custody, in which they remained until their alcoholic contents were ascertained, and that while in my custody no adventitious spirit has been added; and that the samples marked—A 1, Pineau; B 2, Verdeilho; C 3, Verdeilho; D 4, Carbinet, were from grapes pulled and pressed in my presence, and that the must was in my own custody till distilled and alcoholic contents ascertained, and that no adventitious spirit has been added.

LESLEY A. MOODY,
Chief Inspector of Distilleries.

Melbourne, 9th June.

Albury, New South Wales,
19th April, 1875.

I hereby certify that the parcels of samples of grape must, numbered 1, 2, 3, 4, 5, 6, 7, and 8, received by me from Henry Lumsdaine, Esq., chief inspector of distilleries for New South Wales, are now delivered to Lesley A. Moody, Esq., chief inspector of distilleries for Victoria, in the same state, with the exception of fermentation, as when first received by me from Mr. Lumsdaine, and that none of them have been tampered with in any way by any person whatever.

J. SINGLETON,
Inspector of Distilleries, Murray District.

STATEMENT showing the PERCENTAGE of PROOF SPIRITS (British Standard) of the following WINES collected in Albury, New South Wales, and various Districts of Victoria, and Distilled under the supervision of the Chief Inspector of Distilleries, Victoria.

(R., red ; W., white ; B., brown.)

No. of Sample.	Name of Wine.	From whom received.	Name of Vineyard.	Colour of Wine.	Vintage.	Percentage of Proof Spirits (Brit. Standard.)
ALBURY DISTRICT, NEW SOUTH WALES.						
*1	Pineau, F.	H. Lumsdaine	...	B.	1875	34.1
*2	Muscatel, F.	Do.	...	W.	1875	33.1
*3	Verdeilho, F.	Do.	...	W.	1875	29.7
*4	Aucarot, S.	Do.	...	W.	1875	29.2
*5	Verdeilho, S.	Do.	...	W.	1875	32.6
*7	Verdeilho, B.	Do.	...	W.	1875	29.9
*8	Verdeilho, R.	Do.	...	W.	1875	31.8
†9	Pineau, A.	L. A. Moody	...	B.	1875	29.2
†10	Verdeilho, B.	Do.	...	W.	1875	29.9
†11	Verdeilho, C.	Do.	...	W.	1875	31.3
†12	Carbinet, D.	Do.	...	R.	1875	29.6
13	Shiraz	E. Greer and Co.	...	R.	1875	25.0
14	Aucarot	Do.	...	W.	1875	30.9
15	Shiraz	Do.	...	R.	1872	31.6
16	Malbec	Do.	...	R.	1872	29.3
17	Verdeilho	Do.	...	W.	1873	30.4
18	Carbinet	Do.	...	R.	1873	27.6
19	Aucarot	Do.	...	W.	1871	30.7
20	Shiraz	Do.	...	R.	1873	30.9
21	Muscatel	Do.	...	B.	1873	29.1
22	Shiraz	Do.	...	R.	1871	30.2
23	Tokay	J. T. Fallon	Murray Valley	W.	1873	27.4
24	Verdeilho	Do.	Do.	W.	1873	28.8
25	Verdeilho	Do.	Do.	W.	1873	27.0
26	Muscatel	Do.	Do.	B.	...	27.7
27	Carbinet	Do.	Do.	R.	...	25.9
28	Aucarot	Do.	Do.	W.	...	28.8
29	Aucarot	Do.	Do.	W.	...	28.6
30	Tokay	Do.	Do.	W.	...	23.6
31	Shiraz	Do.	Do.	R.	1872	27.3
32	Tokay	Do.	Do.	W.	1868	27.9
33	Riesling	Do.	Do.	W.	1874	27.1
34	Riesling	Do.	Do.	W.	1872	27.6
35	Aucarot	Do.	Do.	W.	1868	28.6
36	Shiraz	Do.	Do.	R.	...	29.5
37	Shiraz	E. Greer and Co.	Do.	R.	1873	31.6
38	Shiraz	Do.	Do.	R.	1872	30.8

* These musts were collected at Albury by Mr. Lumsdaine, chief inspector of distilleries of New South Wales, and fermented in the office of the superintendent of police at Albury, who had them under his charge, and given by him to the chief-inspector of distilleries of Victoria, in whose charge they remained till distilled by him.

† These musts were collected at Albury, N.S.W., by the chief inspector of distilleries of Victoria, in whose charge they were fermented and distilled.

No. of Sample.	Name of Wine.	From whom received.	Name of Vineyard.	Colour of Wine.	Vintage.	Percentage of Pf. Spirits (Brit. Stan.)
MURRAY DISTRICT, VICTORIA.						
39	Shiraz -	Camille Reau -	Tuilleries -	R.	1875	26.5
40	Shiraz -	Do.	Do.	R.	1875	26.9
41	Riesling -	Do.	Do.	W.	1875	25.7
42	Verdeilho -	Do.	Do.	W.	1875	26.8
43	Carbinet -	Do.	Do.	R.	1875	23.9
44	Verdeilho -	J. L. Brown -	Gooramadda -	W.	1875	22.8
45	Riesling -	Do.	Do.	W.	1875	20.1
46	Shiraz -	Do.	Do.	R.	1875	26.3
47	P. Ximenes -	Do.	Do.	W.	1875	24.0
48	Muscatel -	A. & R. Caughey	Mount Prior	R.	1875	25.1
49	Shiraz -	G. P. H. Gerig -	Barnawartha -	R.	1873	29.7
50	Verdeilho -	Hugh Fraser -	Olive-hill -	W.	1875	26.7
51	Muscatel -	A. & R. Caughey -	Mount Prior -	W.	1874	30.2
52	Shiraz -	Do.	Do.	R.	1874	22.7
53	Muscatel -	Do.	Do.	W.	1874	29.1
54	Muscatel -	Do.	Do.	W.	1874	31.9
55	Muscatel -	Do.	Do.	W.	1874	28.1
56	Riesling -	Do.	Do.	W.	1875	26.1
57	Muscatel -	Do.	Do.	W.	1874	31.9
58	Riesling -	Do.	Do.	W.	1875	25.0
59	Shiraz -	Do.	Graham's -	R.	1873	26.5
60	Tokay -	Do.	Do.	W.	1873	26.1
61	Shiraz -	Geo. T. Norris -	Fairfield -	R.	1873	27.9
62	Shiraz -	Do.	Do.	R.	1873	28.4
63	Carbinet -	Do.	Do.	R.	1875	29.1
64	Verdeilho -	Do.	Do.	W.	1875	29.7
65	Shiraz -	J. Martin -	Brown's Plains -	R.	1875	23.7
66	Shiraz -	Do.	Do.	R.	1875	25.7
67	Malbec -	Do.	Do.	R.	1875	22.5
68	Aucarot -	Do.	Do.	W.	1875	24.4
69	Muscatel -	Do.	Do.	W.	1875	25.7
70	Shiraz -	Hugh Fraser -	Olive-hill -	R.	1875	27.0
71	Muscatel -	Do.	Do.	W.	1875	26.1
72	Shiraz -	Do.	Do.	R.	1875	27.0
73	Shiraz -	Do.	Do.	R.	1875	26.5
74	Shiraz -	Do.	Do.	R.	1875	26.1
75	Shiraz -	Do.	Do.	R.	1875	27.2
76	Riesling -	A. & R. Caughey -	Graham's -	W.	1873	23.7
77	Carbinet -	G. P. H. Gerig -	Barnawartha -	R.	1875	25.8
78	Tokay -	Do.	Do.	W.	1875	24.8
79	Muscatel -	Do.	Do.	B.	1875	26.4
80	Aucarot -	Do.	Do.	W.	1875	26.7
81	Riesling -	Do.	Do.	W.	1875	27.7
82	Muscatel -	Do.	Do.	W.	1875	28.4
83	Muscat Al. -	Do.	Do.	W.	1875	26.7
84	Malbec -	Do.	Do.	R.	1875	27.9
85	Verdeilho -	Do.	Do.	W.	1874	28.4
86	Shiraz -	Do.	Do.	R.	1873	30.4
87	Shiraz -	A. & R. Caughey -	Mount Prior -	R.	1875	27.4
88	Muscatel -	Do.	Do.	B.	1875	25.1
89	Shiraz -	Do.	Do.	R.	1875	27.2
90	Shiraz -	Rd. Boger -	Marangan, Benalla	R.	1875	26.3
91	Shiraz -	J. Martin -	Brown's Plains -	R.	1875	27.6
92	Muscatel -	Do.	Do.	W.	1875	27.9
93	Aucarot -	Do.	Do.	W.	1875	27.4
94	Verdeilho -	G. T. Morris -	Fairfield -	W.	1875	28.1

No. of Sample.	Name of Wine.	From whom received.	Name of Vineyard.	Colour of Wine.	Vintage.	Percentage of Pf. Spirits (Brit. Stan.)
95	Shiraz - -	G. T. Morris -	Fairfield -	R.	1875	28.4
96	Shiraz - -	Do. -	Do. -	R.	1875	27.2
97	Verdeilho -	G. P. H. Gerig -	Barnawartha -	W.	1875	26.7
98	Riesling - -	G. T. Morris -	Fairfield -	W.	1875	26.3
99	Shiraz - -	A. & R. Caughey -	Mount Prior -	R.	1875	29.1
100	Riesling - -	Do. -	Do. -	W.	1875	26.6
101	Riesling - -	Do. -	Do. -	W.	1875	28.4
102	Muscatel - -	Do. -	Do. -	B.	1875	27.3
103	Malbec - -	Do. -	Do. -	R.	1875	27.7
104	Aucarot - -	Do. -	Do. -	W.	1875	29.1
105	Riesling - -	Do. -	Do. -	W.	1875	23.7
106	Verdeilho -	G. T. Morris -	Fairfield -	W.	1875	31.2
107	Shiraz - -	Do. -	Do. -	R.	1875	31.9
108	Verdeilho -	Do. -	Do. -	W.	1875	31.5
109	Shiraz - -	Do. -	Do. -	R.	1875	30.8
110	Shiraz - -	Do. -	Do. -	R.	1875	27.7
111	Shiraz - -	Do. -	Do. -	R.	1875	26.0
112	Shiraz - -	Do. -	Do. -	R.	1875	27.1
113	Verdeilho -	Do. -	Do. -	W.	1875	30.8
114	Shiraz - -	H. Fraser -	Olive-hill -	R.	1875	30.8
115	Shiraz - -	Do. -	Do. -	R.	1875	31.2
116	Shiraz - -	Do. -	Do. -	R.	1875	31.2
117	Shiraz - -	Do. -	Do. -	R.	1875	30.8
118	Shiraz - -	Do. -	Do. -	R.	1875	31.6
119	Shiraz - -	Smith & Banks -	Carlisle -	R.	1875	28.6
120	Muscatel - -	Do. -	Do. -	B.	1875	29.3
121	Riesling - -	Do. -	Do. -	W.	1875	28.6
122	Muscatel - -	Do. -	Do. -	B.	1875	28.2
123	Shiraz - -	Do. -	Do. -	R.	1875	27.5
124	Riesling - -	G. P. H. Gerig -	Barnawartha -	W.	1875	27.4
125	Verdeilho -	Do. -	Do. -	W.	1875	31.1
126	Verdeilho -	Do. -	Do. -	W.	1875	32.2
127	Shiraz - -	Hugh Fraser -	Olive-hill -	R.	1875	28.8
128	Muscatel - -	Do. -	Do. -	B.	1875	27.9
129	Shiraz - -	A. & R. Caughey -	Mount Prior -	R.	1875	28.0
130	Shiraz - -	Do. -	Do. -	R.	1875	27.9
131	Riesling - -	Chas. Brasché -	...	W.	1874	23.9
132	Verdeilho -	Do. -	...	W.	1874	27.4
133	Riesling - -	Do. -	...	W.	1874	23.4
134	Shiraz - -	Do. -	...	R.	1874	24.5
135	Shiraz - -	Do. -	...	R.	1874	25.9
136	Shiraz - -	Do. -	Wangaratta -	R.	1869	25.7
137	Malbec - -	Do. -	Do. -	R.	1872	25.4
138	Leverdun -	Do. -	Echuca -	R.	1874	27.2
139	Shiraz - -	R. Boger -	Marangan -	R.	1875	24.2
GOULBURN DISTRICT, VICTORIA.						
140	Shiraz - -	Bear and Ford -	Tabilk -	R.	1875	26.3
141	Carbinet de Sevignon -	Chas. Brasché -	Goulburn -	R.	1873	25.1
142	Riesling - -	Do. -	Do. -	W.	1872	26.3
143	W. Tabilk -	Bear and Ford -	Tabilk -	W.	1874	22.1
144	W. Tabilk -	Do. -	Do. -	W.	1873	21.9
145	W. Tabilk -	Do. -	Do. -	W.	1872	25.2
146	R. Tabilk -	Do. -	Do. -	R.	1873	23.7
147	R. Tabilk -	Do. -	Do. -	R.	1873	23.9
148	R. Tabilk -	Do. -	Do. -	R.	1872	27.7
149	Shiraz - -	Do. -	Do. -	R.	1875	26.9
150	Pineau - -	J. H. Bear -	Plenty -	W.	1873	22.2

No. of Sample.	Name of Wine.	From whom received.	Name of Vineyard.	Colour of Wine.	Vintage.	Percentage of Pt. Spirits (Brit. Stan.)
LILLYDALE DISTRICT, VICTORIA.						
151	Chasselas .	H. de Castella .	St. Hubert's .	W.	1871	24.6
152	Riesling .	Do.	Do.	W.	1869	25.4
153	Chasselas .	Do.	Do.	W.	1869	19.6
154	Hermitage .	Do.	Do.	R.	1873	19.4
155	Burgundy .	Chas. Brasché .	Lillydale .	R.	1875	23.7
156	Hermitage .	Do.	Do.	R.	1875	20.5
SUNBURY DISTRICT, VICTORIA.						
157	Mataro .	J. G. Francis .	Goonawarra .	R.	1871	21.4
158	Hermitage .	Do.	Do.	R.	1871	25.2
159	Verdeilho .	C. Brasché .	Sunbury .	W.	1873	23.9
160	Riesling .	J. S. Johnston .	Craiglee .	W.	1871	22.1
161	Verdeilho .	Do.	Do.	W.	1870	24.7
162	Hermitage .	Do.	Do.	R.	1870	24.0
163	Riesling .	T. Adamson .	Eighnani .	W.	1875	19.4
164	Pineau .	Do.	Do.	W.	1875	17.7
GEELONG DISTRICT, VICTORIA.						
165	Hermitage .	J. Deppler .	Moorabool .	R.	1875	24.5
166	Chasselas .	Do.	Do.	W.	1875	24.9
167	Hermitage .	Do.	Do.	R.	1875	25.9
168	Hermitage .	Do.	Do.	R.	1875	27.3
169	Chasselas .	Do.	Do.	W.	1875	24.9
170	Chasselas .	Jacob Weber .	St. James's .	W.	1875	26.8
171	Chasselas .	Do.	Do.	W.	1875	22.7
172	Hermitage .	Do.	Do.	R.	1875	21.7
173	Chasselas .	Do.	Do.	W.	...	22.7
174	Chasselas .	Do.	Do.	W.	...	22.7
175	Chasselas .	Do.	Do.	W.	1875	26.8
176	Hermitage .	J. H. Dardell .	Paradise .	R.	1875	17.7
177	Hermitage .	Do.	Do.	R.	1875	20.8
178	Hermitage .	Chas. Tetaz .	Albert .	R.	1875	21.5
179	Hermitage .	Do.	Do.	R.	1875	18.3
180	Chasselas .	Do.	Do.	W.	1875	18.7
181	Hermitage .	Do.	Do.	R.	1875	21.7
WESTERN DISTRICT, VICTORIA.						
182	Sauterne .	Joseph Best .	Great Western .	W.	1875	25.4
183	Sauterne .	Do.	Do.	W.	1875	23.9
184	Claret .	Do.	Do.	R.	1875	25.2
185	Claret .	Do.	Do.	R.	1875	21.9
186	Burgundy .	Do.	Do.	R.	1875	26.1
187	Hock .	Do.	Do.	W.	1875	23.2
SANDHURST DISTRICT, VICTORIA.						
188	Riesling .	Chapman .	Sandhurst .	W.	1873	25.0
CASTLEMAINE DISTRICT, VICTORIA.						
189	Roussette .	Otto Jung .	Chinaman Creek .	B.	1871	29.9
190	Hermitage .	Do.	Do.	R.	1871	30.1
191	Cluster .	Do.	Do.	R.	1875	25.9
192	Hermitage .	Do.	Do.	R.	1875	28.8
193	Riesling .	Do.	Do.	W.	1871	29.9
194	Chasselas .	Do.	Do.	W.	1875	24.2
195	Glory .	Do.	Do.	R.	1875	23.0
196	Carignan .	Do.	Do.	W.	1875	18.8
197	Chasselas .	Do.	Do.	W.	1872	24.0
198	Roussette .	Do.	Do.	B.	1871	29.9
199	Cluster .	Do.	Do.	R.	1871	31.6
200	Roussette .	Do.	Do.	B.	1875	30.0
MELBOURNE.						
201	Hermitage .	John Davis .	Moonee Ponds .	R.	1875	25.3

CLASS 660.—Wines, alcohol, and malt liquors.

The information given below shows, "The Name and Variety of Grapes"—"Age of Wine"—"Colour"—"Character"—"Age of Vine"—"Information as to the Soil, Aspect, Elevation, &c."—"Mode of Cultivation," and "Retail Price of the Wine in Victoria."

ARARAT DISTRICT.

TROUETTE AND BLAMPIED, Great Western.

- 2426 Burgundy, 1871; red, light, 10 years; sand and clay, open valley; plough, stakes; 15s. gallon, 36s. dozen.
- 2427 Mixed grapes, claret, 1871; red, light, 10 years; sand and clay, open valley; plough, stakes; 12s. gallon, 30s. dozen.
- 2428 Riesling, Little Muscat, 1874; white, full-bodied, 13 years; sand and clay, open valley; plough, stakes; 12s. gallon, 30s. dozen, 500 gallons.

JOSEPH BEST, Great Western.

- 2429 Hermitage, 1871; red, full-bodied, 5 years; vineyard 45 acres, sand, gravel and clay; plough and hand, stakes; 36s. dozen, 750 gallons.

BEECHWORTH DISTRICT.

F. G. & J. B. DOCKER, Wangaratta.

- 2430 Shiraz, 1869; red, full-bodied, dry, 8 years; 23 acres, rich red loam, aspect north-east, naturally well-drained; plough and scarifier, 20 inches, trained to stakes, 6 feet by 6 feet; 5s. gallon, 15s. dozen, 12,000 gallons.

HENRY EVANS, Beechworth.

- 2431 Shiraz, 1872; dark red, full-bodied, 3 years; chocolate loam granite and quartz; plough and trained to stakes; 6s. gallon

CASTLEMAINE DISTRICT.

FRANCIS MELLON, Dunolly.

- 2432 Hermitage, 1871; red, full-bodied, 12 years; red clay, with calcareous stone surface, quartz, gravel; plough and hoe; 5s. gallon, 12s. dozen.
- 2433 Pineau, 1872; red, full-bodied, 12 years; red clay, with calcareous stone surface, quartz, gravel; plough and hoe, stakes; 4s. gallon, 10s. dozen.

WILLIAM BOTTEN, Eddington.

- 2434 Burgundy, 1869; red, full-bodied, 10 years; sandy loam, north-east aspect; plough and scarifier, stakes; 10s. gallon.

OTTO JUNG, Castlemaine.

- 2435 Hermitage, 1871; red, full-bodied, 13 years; red clay and slate, eastern aspect; by hand, stakes; 7s. 6d. gallon, 20s. dozen; 25 hhds.

- 2436 Roussette, 1871 ; red, full-bodied, 13 years ; red clay and slate, eastern aspect ; by hand, stakes ; 7s. 6d. gallon, 21s. dozen ; 25 hhds.

E. SCHROEDER, Castlemaine.

- 2437 Riesling and Pineau Blanc, 1870 ; straw, light, 10 years ; 10 acres, clay and slate and sandstone ; slope of hill ; aspect, east ; 1050 feet above sea level, trenched by hand, stakes ; 7s. gallon, 20s. dozen.

FABRIZIO CRIPPA, Hepburn.

- 2438 Hermitage, 1871 ; red, light, 12 years ; 4 acres, chocolate soil, on a hill-side ; aspect, north-west ; horse-hoe, stakes ; 5s. gallon, 18s. dozen ; 100 gallons.

ECHUCA DISTRICT.

GREER AND Co., Echuca.

- 2439 Shiraz, 1871 ; full-bodied, 10 years ; loamy ; plough and scarifier.
2440 Shiraz, fruity, 1872 ; full-bodied, 10 years ; loamy ; plough and scarifier.
2441 Shiraz, 1873 ; full-bodied ; chocolate soil ; no record ; price —

JOHN VETTLER, Echuca.

- 2442 Hermitage, 1870 ; red, full-bodied, 5 years ; 12½ acres, sandy soil, slightly elevated ; plough and horse-hoe, trained on wires ; 8s. gallon.
2443 Grenache, 1870 ; red, full-bodied, 4 years ; 1 acre, sandy soil, slightly elevated ; plough and horse-hoe, trained on wires ; 8s. gallon.
2444 Verdeilho, 1872 ; white, full-bodied, 6 years ; sandy soil, level ; plough and horse-hoe, trained on wires ; 8s. gallon, 85 gallons.
2445 Carbinet Sauvignon, 1871 ; red, full-bodied, 5 years ; sandy soil, level ; plough and horse-hoe, trained on wires ; 8s. gallon, 136 gallons.

GEE LONG DISTRICT.

JACOB WEBER, Geelong.

- 2446 Hermitage, 1874 ; red, full-bodied, 12 years ; sandy loam, north-easterly aspect ; plough, stakes ; 4s. gallon, 12s. dozen.

JACOB DEPPELER, Gheringhap.

- 2447 Hermitage, 1874 ; red, full-bodied, 10 years ; sandy loam, limestone bottom, eastern aspect ; trained to stakes ; 4s. gallon.

JOHN RITCHIE, Murgheboluc, Geelong.

- 2448 Hermitage, 1874 ; dark, full-bodied, 10 years ; loam, clay subsoil, aspect east, elevation a rise of 1 in 5 ; plough, stakes ; 4s. gallon, £8 hhd.

GOULBURN DISTRICT.

BEAR AND FORD, Tabilk Vineyard, near Seymour.

- 2449 Riesling, 1872; full-bodied, 10 years; plough and scarifier.

F. EGLI, Tabilk.

- 2450 Hermitage, 1873; red, full-bodied, 8 years; 3 acres, red loam and sand, level; hand labour, stakes; 4s. gallon.

MELBOURNE DISTRICT.

FRANZ SCHMITT, Berwick.

- 2451 Riesling, 1872; white, full-bodied, 6, 8, and 12 years; black loam a heavy black clayey subsoil; aspect, north-west; hand labour, stakes 3 and 4 feet; 20s. dozen.

CHARLES FRANCIS, Sunbury.

- 2452 Hermitage, 1871; red, full-bodied, 10 years; 40 acres, great variety of soil, 800 feet level above the sea; French and Italian fashion, trellis and stakes; 7s. gallon.
- 2453 Gouais, 1870; white, light, 10 years; great variety of soils, sloping west, 750 feet above the sea; in French and Italian fashion; 6s. gallon.

ST. HUBERT'S VINEYARD COMPANY, Yering.

- 2454 Riesling, 1869; white, light, 7 years; 6 acres, rich loam, subsoil clay and gravel; plough and scarifier, stakes; 10s. gallon, 25s. dozen, 10 dozen.
- 2455 Chasselas, 1869; white, light, 7 years; 24 acres, rich loam, subsoil clay and gravel; plough and scarifier, stakes; 3s. gallon, 12s. dozen, 15 dozen.
- 2456 Chasselas, 1871; white, light, 5 years; 24 acres, rich loam, subsoil clay and gravel; plough and scarifier, stakes; 3s. gallon, 12s. dozen, 8 hhds.

J. S. JOHNSTON, Craiglie Vineyard, Sunbury.

- 2457 Riesling, 1872; white, light, 8 years; 5 acres, chocolate loam, clay subsoil, aspect west, gentle slope; plough, trellis; 5s. gallon, 16s. dozen, 850 gallons.
- 2458 Verdeilho, 1871; white, full-bodied, 7 years; 3 acres, chocolate, clay subsoil, aspect west; plough, trellis; 6s. gallon, 18s. dozen.
- 2459 Hermitage, 1869; red, full-bodied, 5 years; 1 acre, chocolate, clay subsoil, aspect west; plough, trellis; 22s. gallon, 60s. dozen.
- 2460 Riesling, Shepherd's, and German, 1871; white, light, 7 years; 5 acres, chocolate, clay subsoil; aspect west, gentle slope, plough, trellis; 6s. gallon, 18s. dozen, 650 gallons.

CHARLES MAPLESTONE, Ivanhoe Lodge, Heidelberg.

- 2461 Hermitage and Carbinet, 1870 ; ruby, light, 14 years ; vineyard, 40 acres, sandy loam ; trellis of 3 wires ; horse and hand labour ; 40s. dozen.
- 2462 Riesling, large and small, 1872 ; white, light, 14 years ; sandy loam ; horse and hand labour ; trellis of 3 wires ; 30s. dozen.
- 2463 Riesling, 1870 ; straw, light, 14 years ; sandy loam ; horse and hand labour ; trellis of 3 wires.

CHARLES BRASCHE, Sunbury.

- 2464 Shepherd's Riesling, 1871 ; white, light, and dry, hock character, 7 years ; stakes ; 30s. dozen, 3 hhds.

E. G. SNOWDEN, Boroondara.

- 2465 Riesling (large), 1871 ; white, medium, 4 to 10 years ; sandy loam ; by horse, bush ; 18s. dozen, 60 dozen.

MURRAY DISTRICT.

G. S. SMITH, Wahgunyah.

- 2466 Muscatel, 1869 ; red, full-bodied, and sweet, 10 years ; light loam, easterly aspect, slightly elevated ; plough and scarifier, stakes ; 5s. gallon.

SANDHURST DISTRICT.

CARL POHL, Strathfieldsaye.

- 2467 Hermitage, 1870 ; red, full-bodied, 5 to 15 years, 3 acres ; sand, red clay subsoil, aspect, north-east ; plough, stakes ; 7s. gallon, 60 gallons.
- 2468 Hermitage, 1871 ; red, full-bodied, 5 to 15 years, $3\frac{1}{2}$ acres ; sand, red clay subsoil, aspect north-east ; plough, stakes ; 7s. gallon, 60 gallons.
- 2469 Hermitage, 1873 ; red, full-bodied, 5 to 15 years ; sand, red clay subsoil, aspect north-east ; by plough, stakes ; 7s. gallon, 60 gallons.
- 2470 Hermitage, 1874 ; red, full-bodied, 5 to 15 years, $3\frac{1}{2}$ acres ; sand, red clay subsoil, aspect north-east ; plough, stakes ; 5s. gallon, 150 gallons.
- 2471 Carbinet and Hermitage, 1868 ; red, full-bodied ; sand, red clay subsoil, aspect north-east ; stakes ; 42s. dozen.
- 2472 Verdeilho, 1874 ; white, full-bodied, 5 to 10 years ; sand, red clay subsoil, north-east aspect ; plough, staked ; 6s. gallon, 90 gallons.

ALBERT BRUHN, Strathfieldsaye, Sandhurst.

- 2473 Verdeilho, 1872 ; white, full-bodied, 10 years ; sand, red clay subsoil ; plough, stakes ; 12s. 6d. gallon, 30s. dozen, 100 gallons.

2474 Hermitage, 1874; red, full-bodied, 10 years; 7 acres, sand, red clay, aspect north-west, with gentle slope; plough and horse-hoe, stakes; 5s. gallon, 1200 gallons.

2475 Carbinet and Hermitage, 1873; red, full-bodied, 12 years; 1 acre, sand and red clay, aspect north-west, elevation, gentle slope; plough and horse-hoe, stakes; 12s. 6d. gallon, 30s. dozen, 200 gallons.

2476 Mataro, 1874; red, light, 12 years; sandy, clay subsoil, aspect north-west, slightly elevated; plough and horse-hoe, bush; 4s. gallon, 150 gallons.

ADOLPH FUCHS, Strathfieldsaye, Sandhurst.

2477 Verdeilho, 1873; white, full-bodied, 3 years; clay, intermixed with sand; horse and hand labour, trained to stakes; 7s. 6d. gallon, 20s. dozen.

2478 Hermitage, 1873; red, full-bodied, 3 years; clay, intermixed with sandy soil; horse and hand labour, stakes; 6s. gallon, 17s. 6d. dozen.

2479 Carbinet, 1873; black, full-bodied, 3 years; clay, intermixed with sandy soil; horse and hand-labour, stakes; 10s. gallon, 25s. dozen.

AUGUST FISCHER, Shamrock Vineyard, Emu Creek, Strathfieldsaye.

2480 Verdeilho, 1874; white, full-bodied, 5 years; $2\frac{1}{2}$ acres, red clay; plough and hand labour, stakes; 10s. gallon, 1 hhd.

2481 Verdeilho, 1873; white, full-bodied, 4 years; $2\frac{1}{2}$ acres, red clay, ploughed, stakes; 10s. gallon, 1 hhd.

2482 Hermitage, 1874; red, full-bodied, 4 years; 3 acres, red clay; ploughed, stakes; 10s. gallon, 1 hhd.

F. K. SHAW, Goornong.

2483 Hermitage, 1871; red, full-bodied, 12 years; 2 acres, chocolate soil, aspect north-west; plough and scarifier, wire trellis; 5s. gallon, 15s. dozen, 350 gallons.

FREDERICK GROSSE, Strathfieldsaye.

2484 Hermitage, 1873; red, full-bodied, 11 years; light loam, clay sub-soil, aspect north-east; plough, stakes; 6s. gallon.

2485 Carbinet, 1873; red, light, 11 years; loam, clay sub-soil, north-east aspect; plough, stakes; 6s. 6d. gallon.

FREDK. GROSSE, Toorongu Vineyard, Bendigo.

2486 Verdeilho, 1873; white, full-bodied, 11 years; light loam, clay subsoil, north-east aspect; plough and scarifier, stakes; 7s. 6d. gallon.

WM. GREIFFENHAGEN, Strathfieldsaye.

2487 Riesling, 1871; white, light, 12 years; 5 acres, sandy loam, red clay subsoil, eastern aspect, level; trenched 2 feet, stakes; 7s. 6d. gallon, 20s. dozen, 15 hhds.

- 2488 Hermitage, 1872; red, full-bodied, 10 years; 6 acres, sandy loam, red clay subsoil, eastern aspect, gentle slope; trenched 2 feet deep, stakes; 10s. gallon, 25s. dozen, 10 hhds.

BROWN, H. J., Australian Distillery, Melbourne.

- 2489 Geneva.
2490 Spirits of Wine.

FULLER, ALFRED, Kew.

- 2491 Bottled Ale.
2492 Bottled Stout.

HENELLY, JAMES, 140 Latrobe-street west, Melbourne.

- 2493 XXXX Ale.

LATHAM, EDWARD, Carlton Brewery, Carlton.

- 2494 Ale.
2495 Ale.
2496 Porter.

MARTIN, P. J., Little Flinders-street east, Melbourne.

- 2497 Ale Brewed from Victorian Malt and Tasmanian Hops.

REED, HENRY, & CO., Chapel-street, South Yarra.

- 2498 Vinegar, in bulk and bottle.

STEWART, JAMES, Eaglehawk, Sandhurst.

- 2498A Ale.
2498B Ale.
2498C Bottled Ale.

TREACY, JOHN & CO., Geelong.

- 2499 Pale Ale, in bottle.
2500 Stout, in bottle.

WARRENHEIP DISTILLERY COMPANY, Sturt-street, Ballarat

- 2501 Whisky, 1874.
2502 Whisky, 1875.
2503 Geneva, proof.
2504 Geneva, o.p.
2505 Spirits of Wine.

CLASS 661.—Bread, biscuits, crackers, and cakes.

GUEST, T. B., & CO., William-street, Melbourne.

- 2506 Fancy Biscuits, consisting of Ginger Nuts, Victorias, Meal Crackers, Cracknells, Picnics, Lime Biscuits.

SMITH & SON, Miller and Anderson streets, West Melbourne.
2507 Fancy and Dessert Biscuits.

SWALLOW & ARIELL, Sandridge and Melbourne.
2508 Fancy Biscuits.
2509 Cabin and Pilot Biscuits.

TEXTILE SUBSTANCES OF VEGETABLE OR ANIMAL ORIGIN.

CLASS 665.—Cotton in the stem, on the boll, ginned, and baled.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

2510 Samples of Cotton, grown from New Orleans Seed on the Murray, Victoria.

CLASS 666.—Hemp, flax, jute, ramie, &c., in primitive forms and in all stages of preparation for spinning.

ATKINSON, WILLIAM, Camperdown.

2511 Teazles, one stave containing 300 head.

LONGMIRE, THOMAS, Kooroocheang, Smeaton.

2512 Two Samples of Flax Stalks, and Seed thereon, Nos. 1 and 2. No. 1 sown on 20th May, 1874, No. 2 sown on 1st September, 1874. Both samples grown on similar land, the only difference being in time of sowing.

M'PHERSON, THOMAS, & CO., 205 Bourke-street West, Melbourne.

2513 Jute, in raw state.

CLASS 667.—Wool in the fleece, carded and in bales.

ARMSTRONG, ALEXANDER, Warramtine, Shelford.

2514 Washed Merino Lambs' Wool.
2515 Washed Merino Ewes' Fleece Wool.
2516 Greasy Merino Ewes' Fleece Wool.

ARNOLD, GEORGE, & CO., Market Buildings, Melbourne.

2517 Greasy Merino, grown by James Gibson, Esq., Cleveland, Tasmania.
2518 Washed Merino, grown by Messrs. Wm. Gibson and Son, Scone, Tasmania.
2519 Greasy Merino, grown by James Gibson, Esq., Cleveland, Tasmania.

- 2520 Washed Merino, grown by James Gibson, Esq., Cleveland,
Tasmania.
- 2521 Greasy Merino, grown by Messrs. Wm. Gibson and Son, Scone,
Tasmania.
- 2522 Washed Merino, grown by James Gibson, Esq., Cleveland,
Tasmania.
- 2523 Greasy Merino, grown by P. Russell, Esq., Langi Willi,
Victoria.
- 2524 Washed Merino, grown by Wm. Cumming, Esq., Mount Fyans,
Victoria.
- 2525 Greasy Merino, grown by A. M. Campbell, Esq., Melaluka,
Victoria.
- 2526 Washed Merino, grown by P. Russell, Esq., Langi Willi,
Victoria.
- 2527 Greasy Merino, grown by Wm. Cumming, Esq., Mount Fyans,
Victoria.
- 2528 Greasy Merino, grown by John Macvean, Esq., Mooloomoon,
Victoria.
- 2529 Greasy Merino, grown by Messrs. Thos. Russell and Co., The
Plains, Victoria.
- 2530 Washed Merino, grown by G. W. Thomson, Esq., Challicum,
Victoria.
- 2531 Greasy Cross-bred, grown by Thos. Millear, Esq., Green Vale,
Victoria.
- 2532 Washed Merino, grown by Messrs. Thos. Russell and Co., The
Plains, Victoria.
- 2533 Greasy Merino, grown by G. W. Thomson, Esq., Challicum,
Victoria.
- 2534 Washed Cross-bred, grown by Thos. Millear, Esq., Green Vale,
Victoria.
- 2535 Greasy Merino, grown by Executors of the late A. Russell, Esq.,
Mawallok, Victoria.
- 2536 Washed Merino, grown by The Hon. P. Russell, M.L.A.,
Carngham, Victoria.
- 2537 Greasy Merino, grown by William Lewis, Esq., Stoneleigh,
Victoria.
- 2538 Washed Merino, grown by Executors of the late A. Russell,
Esq., Mawallok, Victoria.
- 2539 Greasy Merino, grown by The Hon. P. Russell, M.L.A.,
Carngham, Victoria.
- 2540 Washed Merino, grown by William Lewis, Esq., Stoneleigh,
Victoria.
- 2541 Greasy Cross-bred, grown by Messrs. J. and S. Austin, Mount
Pleasant, Victoria.
- 2542 Greasy Lincoln, grown by Wm. Hose Bullivant, Esq., Barwon
Park, Victoria.
- 2543 Greasy Leicester, grown by William Murray, Esq., Brie Brie,
Victoria.
- 2544 Greasy Lincoln, grown by Messrs. J. and S. Austin, Mount
Pleasant, Victoria.

- 2545 Greasy Lincoln, grown by Wm. Hose Bullivant, Esq., Barwon Park, Victoria.
 2546 Greasy Cross-bred, grown by William Murray, Esq., Brie Brie, Victoria.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 2547 Washed Lambs' Wool.
 2548 Greasy Wool.
 2549 Victorian Merino Wool, from S. Robertson, Geelong.

CURRIE, JOHN LANG, Larra, Derimallum, Victoria.

- 2550 Lambs' Wool, washed on the animal. Age of lambs when shorn, six months; breed, merino.
 2551 Merino Ewe Wool, in grease, about twelve months' growth; sheep fed on natural pasturage only.
 2552 Merino Ewes' Wool, washed, about twelve months' growth; fed on natural pasturage only.

DEGRAVES, C. & J., Coliban Park, Elphinstone.

- 2553 Washed Fleece Wool, Lambs'.

ELDER, W. & N. G., Elder, Rookwood.

- 2554 40 lbs. Merino Lambs' Wool, 150 days' growth, hot-water washed.
 2555 50 lbs. Merino two-tooth Ewes' Wool, growth 335 days.
 2556 50 lbs. Merino two-tooth Wethers', 350 days' growth, hot-water washed.

GILBERT, ALFRED NAPOLEON, Warwilla Station, Wanganilla, Deniliquin.

- 2557 Combing Ewes' Merino Wool.
 2558 Prize Rams' Wool, greasy.

GOLDSBROUGH, R. & Co., Wool Warehouse, Bourke-street West.

- 2561 Hot-water Washed Fleece Wool, grown by James Alexander, at Woodhouse Station. 56lbs.
 2562 Greasy Wool, grown by Ross and James Ramsey, at Narrow Plains Station.
 2563 Washed Fleece Wool, grown by Carter Brothers, at Glenisla Station.
 2564 Greasy Fleece Wool, grown by James and Henry Osborne, at Momalong Plains.
 2565 Washed Fleece Wool, grown by A. and H. M'Culloch.
 2566 Greasy Fleece, grown by
 2567 Greasy Fleece, grown by

GREEVES, EDWARD G., Berrialllock, Skipton, Victoria.

- 2568 Greasy Merino Wool, in case.
 2569 Washed Merino Wool, in case.

HASTINGS CUNINGHAM & CO., The Australasian Wool Stores,
Collins-street West, Melbourne.

Fleeces of Wool from the following Breeders:—

- 2570 Greasy Merino, grown by H. Cattanach, Esq., Tallegara.
- 2571 Greasy Merino, grown by C. W. Simson, Esq., Mundagal.
- 2572 Greasy Merino, grown by Messrs. Godfrey and Chambers,
Pevensey.
- 2573 Greasy Merino, grown by F. L. Parker, Esq., Quiamong.
- 2574 Greasy Merino, grown by Messrs. Everett and Watson,
Tchelery.
- 2575 Greasy Merino, grown by Messrs. Everett and Watson, Nyang.
- 2576 Greasy Merino, grown by The Hon. William Lang, M.L.A.,
Wargam.
- 2577 Greasy Merino, grown by The Hon. Phillip Russell, M.L.A.,
Carngham.
- 2578 Greasy Merino, grown by The Hon. Phillip Russell, M.L.A.,
Langi Willie.
- 2579 Greasy Merino, grown by John L. Currie, Esq., Larra.
- 2580 Greasy Merino Ewe, grown by Messrs. Thomas Dowling and
Sons, Jellalabad.
- 2581 Greasy Merino Ram, grown by Messrs. Thomas Dowling and
Sons, Jellalabad.
- 2582 Greasy Merino, grown by Executors of late A. Russell, Esq.,
Mawallock.
- 2583 Greasy Merino, grown by William Lewis, Esq., Stoneleigh.
- 2584 Greasy Merino, grown by Ewan M'Pherson, Esq., Binduck.
- 2585 Greasy Merino, grown by Godfrey M'Kinnon, Esq., Goonambill.
- 2586 Greasy Merino, grown by Messrs. Russell and Shaw, Eli Elwah.
- 2587 Greasy Merino, grown by Messrs. Rutherford Brothers,
Ulupna.
- 2588 Greasy Merino, grown by The Hon. Robert Simson, M.L.A.,
Langi Kal Kal.
- 2589 Greasy Merino, grown by Messrs. Nichol and Telford, Tarra-
wonga.
- 2590 Greasy Merino Lincoln Rams', grown by Messrs. Knight and
Lydiard, Koorongah.
- 2591 Greasy Merino Ewes', grown by Messrs. Knight and Lydiard,
Koorongah.
- 2592 Greasy Merino Crossbred, grown by Mount Battery Co., Mount
Battery.
- 2593 Greasy Merino, grown by Alfred Chenery, Esq., Delatite.
- 2594 Washed Fleece, grown by The Hon. Phillip Russell, M.L.A.,
Carngham.
- 2595 Washed Fleece, grown by Executors of late A. Russell, Esq.,
Mawallock.
- 2596 Washed Fleece, grown by The Hon. Robert Simson, M.L.A.,
Langi Kal Kal.
- 2597 Washed Fleece, grown by Alexander Wilson, Esq., Mount Emu.
- 2598 Washed Fleece, grown by William Lewis, Esq., Stoneleigh.

- 2599 Washed Fleece, grown by John L. Currie, Esq., Larra.
 2600 Washed Fleece, grown by The Hon. Phillip Russell, M.L.A.,
 Langi Willi.
 2601 Scoured Merino, J. G. Reeves, Esq., Footscray.

HENTY, EDWARD, Portland.

- 2602 Cheviot Ewes' Wool.
 2603 Cheviot Lambs' Wool.
 2604 Merino Ewes' Wool.

KEYNES, JOSEPH, Keyneton, South Australia.

- 2605 Washed Pure Leicester Fleece.
 2606 Merino Wool (Ewe), 360 days' growth.

LANG, WILLIAM, Wargam, Wanganilla, New South Wales.

- 2607 Fleeces of Greasy Wethers' Wool.
 2608 Fleeces of Greasy Hoggets' Wool.

MOORE & CO., Coorong, near Hay, N.S.W.

- 2609 Bale Scoured Fleece Wool.

M'VEAN, JOHN, Woolloomoonoo, N.S.W.

- 2610 Greasy Ewes' Wool.

REEVES, ISAAC GODFREY, Footscray, Melbourne.

- 2611 Scoured Fleece Wool.

RUSSELL, THOMAS, Barunah Plains, Mount Hesse.

- 2612 Hot-water Washed Wool.

RUTLEDGE, WILLIAM, Farnham Park, Warrnambool.

- 2613 Twenty Ewes' Fleeces, washed, 335 days' growth.
 2614 Twenty Wedder Fleeces, washed, 365 days' growth.

RUTHERFORD, ANDREW, Como, Kensington, Geelong.

- 2615 Fleeces of Wool in Grease, Lincoln and Leicester.

SYNNOT, MONCKTON, Little Flinders-street, Melbourne.

- 2616 Wool.

SYNNOT, GEORGE & CO., Geelong.

- 2617 Wool.

THOMAS, C. THOMAS, Bay-street, North Sandridge.

- 2618 Dressed Skin of Pure Romney 4-tooth Ewe (eight months' wool),
 bred by R. Muldoon, Esq., Boos.

TIMMS BROTHERS, Mount Hesse, Beeac.

- 2619 Bale of young Ewes' Wool, hot-water washed.
 2620 Bale of 4-tooth Wethers' Wool, hot-water washed.

WATSON, ALEXANDER, Warribee.

- 2621 Washed Merino Ewes' Fleece.
- 2622 Washed Merino Lambs' Fleece.
- 2623 Greasy Ewes' Fleece.
- 2624 Pure Washed Leicester.

WILSON, SIR SAMUEL, Oakleigh Hall, East St. Kilda.

- 2624A Bale of Hoggets' Fleece Wool, washed, from Mount Bute Estate.
- 2625 Bale Washed Ewes' Fleeces, from Mount Bute Estate.
- 2626 Bale Washed Ewes' Wool, from Ercildoun Estate.
- 2627 Bale Washed Hogget Ewes' Wool, from Ercildoun Estate.
- 2628 Bale Greasy Ewes' Fleece Wool, "Merino," from Ercildoun Estate.

WILSON, JOHN, Lismore.

- 2629 Greasy Merino Lambs' Wool.
- 2630 Greasy Merino Ewes' Wool, 12 months' growth.
- 2631 Greasy Merino Wethers' Wool, 12 months' growth.

CLASS 688.—Silk in the cocoon and reeled.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

- 2632 Silk Cocoons, from the Acclimatisation Society of Victoria.
- 2633 Silk Cocoons, from Mrs. Bladen Neill.
- 2634 Cultivated Silk, in cocoons and hanks; also, bleached, dyed, and worked upon Llama.

HOWARD, JOHN, near Albury.

- 2635 Sample Cocoons of thirty-five different kinds of Mulberry Silk-worms, with wound silk in its natural colours.
- 2636 Floss Silk.
- 2637 Japanese Grain.
- 2638 Italian Grain.
- 2639 Hanks of suffocated and pierced Cocoons.

MACHINES, IMPLEMENTS, AND PROCESSES OF MANUFACTURE.

CLASS 670.—Tillage.—Manual implements, spades, hoes, rakes. Animal power machinery, ploughs, cultivators, horse-hoes, clod-crushers, rollers, harrows. Steam power machinery, ploughs, breakers, harrows.

LENNON, HUGH, Elizabeth-street, North Melbourne.

- 2640 Excelsior Double Furrow Plough.

CLASS 674.—Applicable to farm economy.—Portable and stationary engines, chaffers, hay and feed cutters, slicers, pulpers, corn mills, farm boilers and steamers, incubators.

BODINGTON, ROBERT, 4 Queensberry-street, Carlton.

- 2641 Sharp's Patent Sheep Support on rollers, used in the washing of sheep by spouts or jets.

DEPARTMENT VII.—HORTICULTURE.

ORNAMENTAL TREES, SHRUBS, AND FLOWERS.

CLASS 707.—Ferns, their management in the open air, and in ferneries, wardian cases, &c.

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- 2642 Tree Ferns, from Dandenong State Forest.
 2643 Tree Ferns, from Mount Macedon.
 2643A Todea Ferns, from Mount Macedon.

CLASS 709.—Floral designs, &c. Cut flowers, bouquets, preserved flowers, leaves, seaweeds. Illustrations of plants and flowers. Materials for floral designs. Bouquet materials, bouquet holders, bouquet papers; models of fruit, vegetables and flowers.

COMMISSIONERS FOR VICTORIA FOR THE PHILADELPHIA EXHIBITION, Melbourne.

The following *fac similes* consist of specimens, the originals of which were selected during the past season, modelled and arranged for the Commissioners by Mr. Thos. M'Millan. They embrace most of all the important species cultivated, and in many cases such assortments of varieties as are calculated to sufficiently illustrate the orchard and other open ground fruit-producing capabilities of Victoria.

ARBORESCENT FRUITS.

POMACEOUS FRUITS, INCLUDING THE APPLE AND PEAR AND THEIR ALLIES.

The Apple—Pyrus malus.

- 2644 Adams' Pearmain (266). Josiah Trevestan, Ballarat.
 2645 Alfreton (179). Charles Draper, Hazelglen.
 2646 Allanbank Seedling (177). „ „
 2647 Betty Geeson (230). „ „
 2648 Blondin (292). H. U. Cole, Twyford, Upper Hawthorn.
 2649 Blenheim Orange (206). C. Draper.

- 2650 Blenheim Orange (253). Robert Whatmough, Greensborough.
 2651 Borovitzki (145). C. Draper.
 2652 Boston Russet (272). „
 2653 Boston Russet (209). „
 2654 Brabant Bellefleur (191). „
 2655 Bridgewater Pippin (137). Horticultural Society of Victoria.
 2656 Burkelhardt's Reinette (241). John Harbison, Essendon.
 2657 Callasaga (239). „ „
 2658 Cellini (210). C. Draper.
 2659 Cellini (265). J. Trevestan.
 2660 Cleopatra (216). C. Draper.
 2661 Clayton (304). C. Draper.
 2662 Cleopatra (281). Robert Whatmough.
 2663 Cockle Pippin (173). John Smith & Sons, Riddell's Creek.
 2664 Comet (287). T. C. Cole.
 2665 Compton (153). Horticultural Society of Victoria.
 2666 Compton (163). Robert Whatmough.
 2667 Cornish Aromatia (188). C. Draper.
 2668 Cornish Gilliflower (262). King & Sons, Fyansford.
 2669 Court Pendu (Court Pendu Rose? 263). Geelong and Western
 District Agricultural and Horticultural Society.
 2670 Cox's Orange Pippin (181). Charles Draper.
 2671 Cox's Pomona (243). J. Harbison.
 2672 Crisp Pippin (291). H. U. Cole.
 2673 Crow's Egg (270). C. Draper.
 2674 Crow's Egg (313). W. N. Hunt, Malvern.
 2675 Devonshire Quarrenden (139). Horticultural Society of Vic-
 toria.
 2676 Draper's Unknown (146). Charles Draper.
 2677 Dumelow's Seedling (202). Chas. Draper.
 2678 Dutch Mignonne (310). „
 2679 Emperor Alexander (178). „
 2680 Emperor Alexander (244). Chas. Allan, jun., South Brighton.
 2681 Esopus Spitzenberg (240). J. Harbison.
 2682 Esopus Spitzenberg (269). C. Draper.
 2683 Fair Ellen (166). R. Whatmough.
 2684 Fairy (274). „
 2685 Fall Pippin (196). „
 2686 Fearn's Pippin (219). „
 2687 Forge (233). „
 2688 Forge (311). „
 2689 Garibaldi (314). Horticultural Society of Victoria.
 2690 Ginston's Nonpareil (167). Robt. Whatmough.
 2691 Gladney's Red (305). C. Draper.
 2692 Gloster Pippin (152). Horticultural Society of Victoria.
 2693 Golden Noble (172). J. Smith and Son.
 2694 Gravenstein (171). „
 2695 Guinea Apple (286). T. C. Cole.
 2696 Hambeldon deux Ans (315). Thomas Christian, Mount
 Macedon.

- 2697 Herefordshire Pearmain (225). C. Draper.
 2698 Homony (140). Horticultural Society of Victoria.
 2699 Hone's Albert (261). W. Lawford, Doncaster.
 2700 Horn (298). C. Draper.
 2701 Indian Winter (301). C. Draper.
 2702 Jewett's Best (242). J. Harbison.
 2703 Kentish Fillbasket (264). Geelong and Western District Agricultural and Horticultural Society.
 2704 Kentucky Red Streak (300). C. Draper.
 2705 Keswick Codlin (147).
 2706 King John (285). T. C. Cole. "
 2707 Lake (138). Horticultural Society of Victoria.
 2708 Lord Lennox (149). C. Draper.
 2709 Lord Lennox (199). "
 2710 Lord Suffield (142). "
 2711 Lord Suffield (237). J. Carson, President of the Horticultural Society of Victoria.
 2712 Maiden's Blush (160). R. Whatmough.
 2713 Maiden's Blush (200). C. Draper.
 2714 Mannington's Pearmain (212). C. Draper.
 2715 Mère de Ménage (236). H. U. Cole.
 2716 Mob's Royal (226). C. Draper.
 2717 Mother (235). J. Roberts.
 2718 Norfolk Beaufin (187). C. Draper.
 2719 Northern Spy (231). "
 2720 Northwood (256). R. Whatmough.
 2721 Pearmain, New Scarlet (282). T. C. Cole.
 2722 Pomme de Neige (312). H. Boyce, Gardener to the Hon. Henry Miller.
 2723 Porter (141). J. Harbison.
 2724 Prince Bismarck (275). Mr. Freike, Carisbrook.
 2725 Rhode Island Greening (273). C. Draper.
 2726 Rhode Island Greening (192).
 2727 Ribston Pippin (184). W. Lawford.
 2728 Rock Pippin (283). T. C. Cole.
 2729 Royal Russet (255). R. Whatmough.
 2730 Royal Russet (197). C. Draper.
 2731 Red Calville (252). R. Whatmough.
 2732 Reinette de Canada (276). Mr. Freike, Carisbrook.
 2733 Romanite (308). C. Draper.
 2734 Rymer (288). T. C. Cole.
 2735 Scarlet Nonpareil (183). C. May, Sunbury.
 2736 Shockley (303). Chas. Draper.
 2737 Shorland Pearmain (293). H. U. Cole.
 2738 Silver Reinette (289). T. C. Cole.
 2739 Silverskin (290). T. C. Cole.
 2740 Southend (294). H. U. Cole.
 2741 Southern Greening (295). H. U. Cole.
 2742 St. Lawrence (280). R. Whatmough.
 2743 Stoup Leamington (174). J. Smith and Sons.

- 2744 Stephenson's Winter (306). C. Draper.
 2745 Stetling Pippin (165). R. Whatmough.
 2746 Summer Rose (144). C. Draper.
 2747 Sutton's Seedling (299). „
 2748 Summer Queen (150). „
 2749 Tom Marland (156). R. Whatmough.
 2750 Tuscalosa Seedling (307). C. Draper.
 2751 Tower of Glamis (162). R. Whatmough.
 2752 Tower of Glamis (186). C. Draper.
 2753 Twyford Pippin (290½). T. C. Cole.
 2754 Warner's King (143). C. Draper.
 2755 Warner's King (161). R. Whatmough.
 2756 Washington (201). C. Draper.
 2757 Whatmough's Bitter Sweet (259). R. Whatmough.
 2758 „ „ „ (558). „
 2759 „ „ „ (260). „
 2760 „ Tom Thumb (245). „
 2761 „ Lancashire Lass (246). „
 2762 „ Willis Vale Beauty (247). „
 2763 „ Scarlet Pearmain (248). „
 2764 „ Winter Pippin (249). „
 2765 „ Fancy (250). „
 2766 „ Red Streak (277). „
 2767 „ King of the Pippins (254). „
 2268 William's Favourite (148). C. Draper.
 2769 Winter Majetin (208). „
 2770 Winter Peach (271). „
 2771 Winter Pippin (284). T. C. Cole.
 2772 Yellow Bellefleur (232). C. Draper.
 2773 White Moss (158). R. Whatmough.

The Pear—Pyrus communis.

- 2774 Aglae Gregoire (60). J. C. Cole, Richmond Nursery.
 2775 Alexandre Lambré (46). Charles Draper, Hazelglen.
 2776 Bergamot, Autumn (96). J. Harbison, Essendon.
 2777 Bergamot, Gansel's (88). J. D. Roberts, Hawthorn.
 2778 Beurre d'Amanlis (98). J. Harbison.
 2779 „ d'Anjou (39). C. Draper.
 2780 „ „ (112). Robert Hepburn, Hawthorn.
 2781 „ Bosc (84). A. Stuart, Gardener to T. Armstrong, Toorak.
 2782 „ Bosc (79). R. Hepburn.
 2783 „ Capiaumont (83). George Kilroy, Gardener to P. Blake, Caulfield.
 2784 „ Clairgeau (105). Robert Whatmough, Greensborough.
 2785 „ Diel (53). C. May, Sunbury.
 2786 „ „ (64). J. Harbison.
 2787 „ „ (117). C. Draper.
 2788 „ d'Esperen (40). „
 2789 „ Giffard (30). Horticultural Society of Victoria.
 2790 „ Hardy (a and b 78). R. Hepburn.

- 2791 Beurre Superfin (*a* and *b* 68). R. Hepburn.
 2792 „ Sterckman's (119). R. Whatmough.
 2793 „ Citron des Carmes (32). Horticultural Society of Victoria.
 2794 Conseilleur de la Cour (123). C. Draper.
 2795 Culotte de Suisse (107). J. Webber, Geelong.
 2796 Désiré Cornélis (74). „
 2797 „ „ (87). „
 2798 Doyenne Boussoch (86). „
 2799 Doyenne du Comice (75). R. Hepburn.
 2800 „ „ (111). „
 2801 Duchesse d'Angoulême (90). J. D. Roberts.
 2802 „ „ (118). R. Whatmough.
 2803 Durandean (41). C. Draper.
 2804 Emile d'Heyst (122). „
 2805 Gratioli of Jersey (33). Garden of the Horticultural Society of
 Victoria.
 2806 Frederic de Wurtemberg (89). J. D. Roberts.
 2807 Hessle (32½). Horticultural Society of Victoria.
 2808 Huysche's Victoria (124). C. Draper.
 2809 Josephine de Malines (115). James Lang, Harcourt.
 2810 King Edward's (52). J. C. Cole.
 2811 Leon le Clerc Laval (72). R. Hepburn.
 2812 „ „ „ (126). Sir Redmond Barry.
 2813 Louise Bonne of Jersey (102). J. Banks, Flemington.
 2814 Marie Louise (35). Archibald Stuart.
 2815 „ „ (108). Mr. James, Mount Pleasant, Ballarat.
 2816 Madame Cole (61). J. C. Cole.
 2817 Madame Treyve (50). „
 2818 „ „ (95.) J. Harbison.
 2819 Nouvelle Fulvie (59). J. C. Cole.
 2820 Passans du Portugal (114). J. Harbison.
 2821 Poire de Berriays (36). C. Draper.
 2822 Poire de Berriays (82). George Kilroy, gardener to P. Blake,
 Caulfield.
 2823 Preston Beurre (97). J. Harbison.
 2824 Reine de Precoce (29). Horticultural Society of Victoria.
 2825 Soldat Esperen (48). J. C. Cole.
 2826 Summer Doyenne (31). Horticultural Society of Victoria.
 2827 St. Michael Archange (109). J. C. Cole.
 2828 Triomphe de Jodoigne (57). „
 2829 Triomphe de Jodoigne (106). J. Webber, Geelong.
 2830 Urbaniste (69). R. Hepburn.
 2831 Uvedale's St. Germaine (34). Archibald Stuart.
 2832 Uvedale's St. Germaine (128). Joseph Bosisto, Richmond.
 2833 Uvedale's St. Germaine (129). Joseph Webster, Wahgunyah.
 2834 Vicar of Winkfield (57). H. U. Cole, Upper Hawthorn.
 2835 Vergaleuse (38). C. Draper.
 2836 Vineuse (58). J. C. Cole.
 2837 Whatmough's Nonsuch (104). R. Whatmough.
 2838 Winter Nelis (70). A. Stuart.

- 2839 Winter Nelis (113). James Lang.
 2840 William's Bon Chretien (101). Charles Allan, junior, South Brighton.
 2841 Whatmough's Bon Chretien (120). R. Whatmough.
 2842 Zépherin Louis Grégoire (47). J. C. Cole.

(2) *The Quince—Cydonia vulgaris.*

- 2843 Pear-shaped, Sir Redmond Barry.
 2844 Portugal, J. Webber, Geelong.

The Medlar—Mespilus Germanica.

- 2845 Photograph.
 2846 *The Loquat—Eriobotrya Japonica.*

STONE FRUITS, OR FLESHY DRUPES.

1. DRUPACEÆ VERÆ.

The Peach—Amygdalus.

- 2847 Newington (8). C. Draper.
 2848 Duke of Edinburgh (9). R. Whatmough.
 2849 Pike's Seedling (10). W. Lawford.
 2850 Whatmough's Seedling, two specimens (11 and 12). R. Whatmough.
 2851 Salway (13). J. M'Donald.
 2852 Salway (14). Geelong and Western District Agricultural and Horticultural Society.

The Nectarine—Amygdalus Persica var.

- 2853 Pitmaston Orange (?). R. Whatmough.
 2854 A Dish of Fruit (3 and 4). Market.

The Apricot—Prunus Armeniaca.

- 2855 A Dish of Fruit.

The Plum—Prunus domestica.

- 2856 A Dish of Fruit. 11 varieties.

The Cherry—Prunus cerasus.

- 2857 A Dish of Fruit. 25 species, 3 fruits each.

2. OLEACEÆ.

- 2858 *The Olea Europæa* (Photograph).

BERRIED OR BACCATE FRUITS AND THEIR MODIFICATIONS.

The Grape—Vitis vinifera.

- 2859 A Bunch of Black Hamburg (see also Photographs).

The Mulberry—Morus nigra.

- 2860 A Small Dish.

The Fig—Ficus carica.

- 2861 A Dish of Fruit. 4 varieties.

The Pomegranate—Punica Granatum.

- 2862 One Fruit. Chas. Stone, Brighton.

The Orange or Citron tribe—Citrus.

- 2863 A Collection. 17 species.

The Kau Apple—Aberia Caffra.

- 2864 Specimen presented by Mr. Graham.

- 2865 Specimen from the Melbourne Botanical Gardens.

- 2866 Half-section of the same.

The Gooseberry—Ribes Grossularia.

- 2867 Hero of the Nile (1). Thomas Lang and Co.

- 2868 King of Trumps (2). " "

- 2869 Telegraph (3). " "

- 2870 Gretna Green (4). " "

- 2871 Snowdrop (5). " "

- 2872 Patience (6). " "

- 2873 Mitre (7). " "

- 2874 Whitesmith (8). " "

- 2875 Flora (9). " "

- 2876 Goby (10). F. Moss, Buninyong.

- 2877 Drill (11). " "

- 2878 High Sheriff (12). Thomas Lang and Co.

- 2879 Briton (15). " "

- 2880 Eagle (16). " "

- 2881 Roaring Lion (17). " "

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